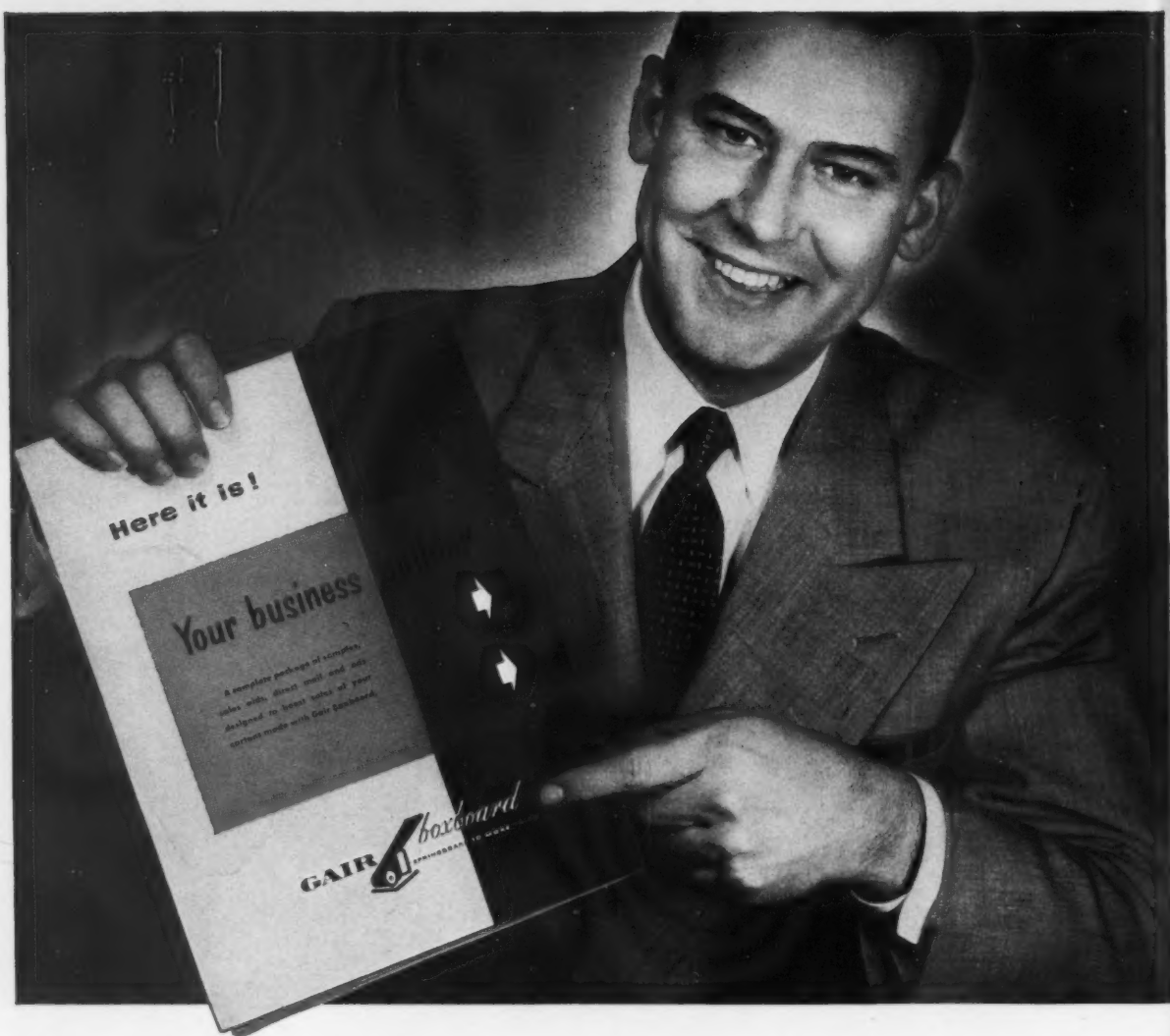




Connecticut
INDUSTRY
FEBRUARY 1955



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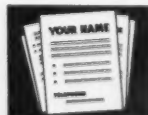


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HARD-HITTING SALES LITERATURE spells out product features, technical information. Makes answering inquiries almost automatic.



Connecticut INDUSTRY

MANUFACTURERS' ASSOCIATION OF CONNECTICUT, INC.
VOL. 33 - NO. 2 - FEBRUARY, 1955

L. M. BINGHAM, Editor

IN THIS ISSUE

	Page		Page
Editorial	5	News Forum	23
The Bilco Story	6	Foreign Trade	41
Career Opportunities Highlighted By Utility Companies	8	Accounting Hints	43
The Application of Standard Data To Office Incentives	10	Business Tips	45
Is It "Abracadabra" or A "Mad Rushyan?"	14	Spotlight on the Future	51
Finishing The Foundation . . . Starting the Superstructure	16	Business Pattern	52
Connecticut's Career Building Opportunities For Youth	17	Connecticut Advertising Services	56
		It's Made In Connecticut	57
		Advertising Index	68

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A.O. Smith



Here are some of the famous TRADEMARKS heading up listings of local dealers in the YELLOW PAGES of telephone directories.

When your customer is in the market for your goods, be sure he knows where to find your dealers through having your TRADEMARK represented in the YELLOW PAGES.

For full information about TRADEMARK representation in any telephone directory in any area of the state or nation — wherever your dealers are located — just ask your local telephone business office to have a Trademark Representative get in touch with you.

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OWNED AND OPERATED BY AND FOR CONNECTICUT PEOPLE

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85 TRUMBULL STREET, HARTFORD 1, CONNECTICUT

It's no longer they - or you -

It's WE

For over 100 years Kellogg & Bulkeley and Case, Lockwood & Brainard lived apart in a state of friendly competition. A few years ago the two firms were consolidated, last May the two offices were

joined, and at the first of this year further steps in the unification process were taken. The personnel of what were once two firms are now working with each other as one firm. The different office forms have all been made the same. The purchasing for the two companies has been consolidated.

And it all means savings for the customer without any reduction in the quality for which both old companies have long been noted.

Case, Lockwood & Brainard
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85 Trumbull Street, Hartford 1, Connecticut

Connecticut Printers, Incorporated
CASE, LOCKWOOD & BRAINARD, Lithographic Division
85 Trumbull Street, Hartford 1, Connecticut.

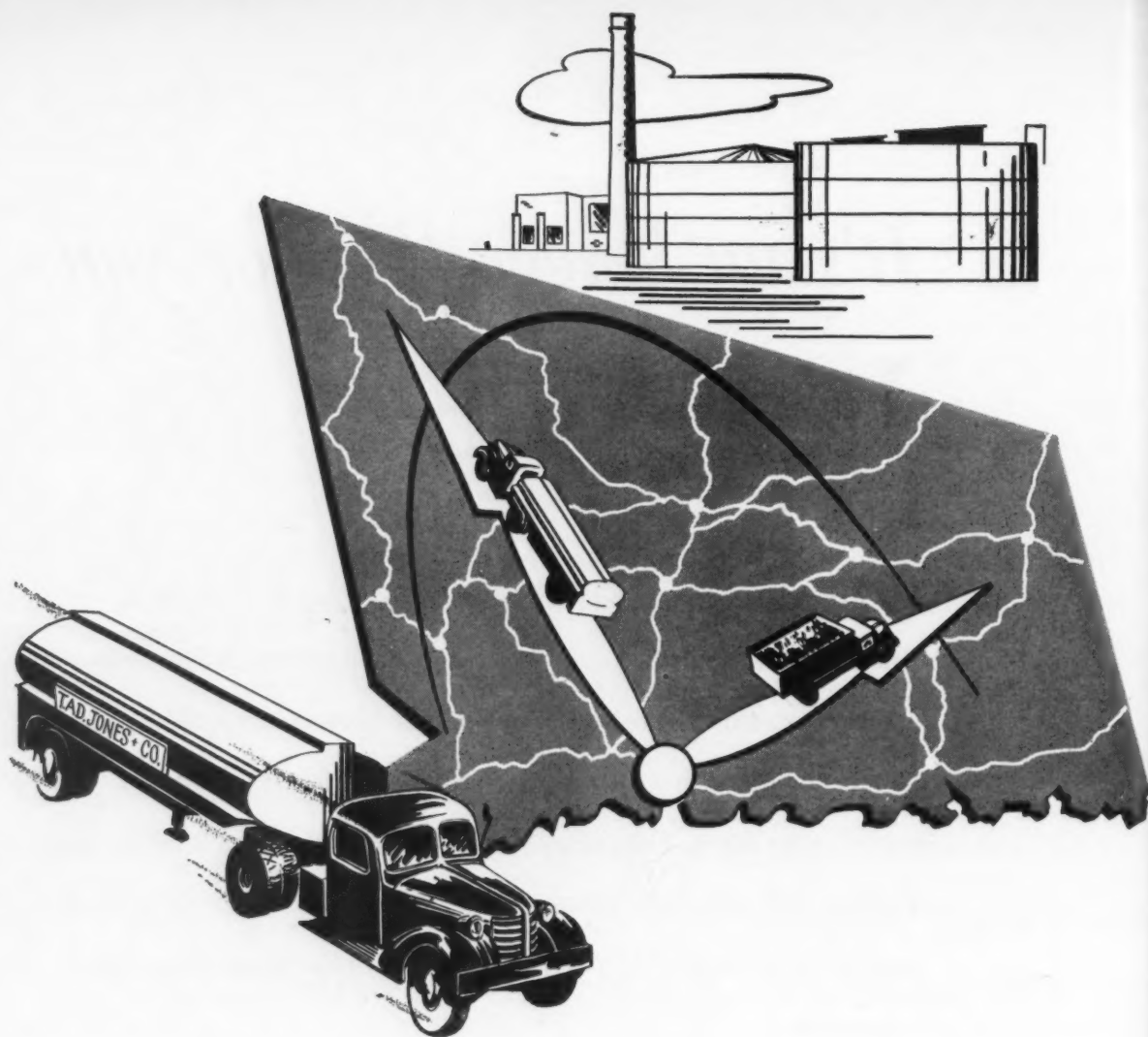
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OLD BALANCE	DATE	REF. NO.	MEMO	AMOUNT OF INVOICE	DEDUCTION	BALANCE

DETACH BEFORE DEPOSITING	REF. NO.	MEMO	AMOUNT OF INVOICE	DEDUCTION	BALANCE	REMARKS

Connecticut Printers, Incorporated



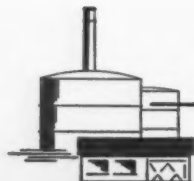
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Fuel for the hungry fires of industry — serving Connecticut and western Massachusetts from one of the largest bulk storage plants in New England.

24 hours a day, T. A. D. Jones and Company delivers — by truck, rail and barge — Bunker 'C' fuel oil, bituminous and anthracite coal.

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INDUSTRIAL REVOLUTION, COUNTRY STYLE*

By PETER H. COMSTOCK, *President*

Pratt, Read & Co., Inc., Ivoryton, Conn.

CONNECTICUT is dotted with small towns and villages, often referred to as "mill towns", which have sprung up around the factories furnishing employment to the bulk of the populace living there. Most of these are bisected by streams as the original establishments depended wholly on water power to activate their machinery. Perhaps the tremendous changes which have come to these towns and businesses have been overlooked by many who have followed more closely the development of our industrial cities. Therefore a look into the immediate past should prove interesting.

Ivoryton, township of Essex, is typical of such a village. It was here that Pratt, Read and Co., Inc., world's largest manufacturer and supplier of piano and organ keys and piano actions, had its humble beginning in 1798. Since that time, the "piano works" has been the largest employer within the area. Its ups and downs have had a direct influence on the economy of the community.

Until fairly recently, our factory depended for its success on the uniqueness of its product and on the hard-fisted dominance of operating heads whose ingenuity and forceful personalities were able to channel the efforts of the skilled local craftsmen into productive and remunerative channels. One man rule and low overhead were the order of the day. Increased competition, both for a share of the market and for necessary skills, has changed all this as has the increased tempo of business resulting from the industrial expansion caused by the recent war. From necessity we have had to look at management as a science rather than the strong hands necessary to make men and machines produce a product. Overhead, although watched daily and searchingly, has zoomed, but the resulting teamwork has given us versatility and an efficiency of production that has enabled us to meet competition for the consumer's dollar.

Perhaps the greatest change has taken place in the realm of employee skills. In the horse and buggy days local workers looked almost exclusively to the village mill for employment. Successive generations aspired to fill the same jobs. The factory was an institution and land mark as unquestioned as the town meeting, the general store or the local church. Migration of workers was the rare exception. Improved transportation—particularly the automobile,

changed the picture completely. The insular economy of New England towns was shattered. Town mills had to compete for workers with factories in other towns and the large cities. Formerly only a small part of a superintendent's time was allocated to hiring enough help to keep the wheels turning. Now the specially trained personnel manager is engaged full-time in this and related activities. He and his staff of specialists have become as essential in industry as the production manager or the sales manager.

Labor costs have skyrocketed. To meet the challenge and compete successfully, the "mill on the stream" went modern. Engineers were brought in to design and install machines to utilize the time of employees more efficiently. The high voltage power line replaced the water wheel. Drive shafts and hand trucks gave way to motors and conveyors. Process engineers replaced the supervisor who "always did it that way". In short, the management team today scrutinizes every operation, every process to find a less expensive, faster and better way of doing it. Automation has come to small town industry.

Automation is no respecter of tradition. Less than ten per cent of the piano keys now produced in Ivoryton are now covered with ivory. The great majority are plastic covered. Traditional hand-worked ebony piano sharps are very few compared to the molded, mechanically processed phenolic sharps. Pratt Read's multi-story factory, a landmark for over 100 years, will soon be replaced by a single story, humidified, wide-spanned manufacturing space. The rough mill is completely conveyORIZED and lumber is mechanically handled from lumber yard through the kilns, dry storage, the mills and into final processing.

New machines and better methods have resulted not only in greater production efficiency, but have insured essential quality in processing precision wood parts with tolerances gauged to thousandths of an inch. These improvements—and many others—have enabled Pratt Read to maintain its leadership in the piano key and action industry.

Pratt Read is only one example of the many "small town" Connecticut industries who have recognized and met successfully this Country Style Industrial Revolution. It is to these industries that this tribute is written. A job well done. It has been a cooperative progressive advance, in step with all Connecticut industry, resulting in high standards and benefits for all.

* This is one of a continuing series of guest editorials contributed by executives of MAC member companies.



PARTIAL VIEW of The Bilco plant at West Haven

The Bilco Story

By Carl F. Bissell

Editors Note: One of the episodes in Connecticut's fascinating history of Yankee ingenuity, this story of the Bilco Company demonstrates that old fashioned ingenuity can still write a success story without benefit of modern laboratories. It is also a demonstration of the constructive power of teamwork when honestly conceived and stimulated by conscientious management.



WORKMEN shaping a component part of the BILCO basement door on a huge braking press.

MANY of the firms which help give Connecticut its industrial stature are family affairs, the management of which is passed to succeeding generations.

There are countless father-son combinations, too, in the professions as well as in business and industry. It all is a traditional sort of thing which, some say, helps give enviable stability to these firms.

The BILCO Company of West Haven, a comparative newcomer to this state's industrial scene, is a family affair in the true Connecticut tradition.

Not only is it wholly owned by Mr. and Mrs. George W. Lyons, Sr., and their five sons and one daughter; but with their father, the five Lyons brothers hold the key management and production posts.

Actually, the family angle goes somewhat farther, encompassing all BILCO personnel who, for instance, share a fifth of the company's annual profits, and enjoy other privileges which mark them as members of the family.

All this can be laid to the elder Lyons' strong sense of the importance of team play, his practice of making

the other fellow feel he belongs. It is even passed on to strangers in a leaflet one finds on the reception room table, the opening paragraphs of which read:

"A most cordial welcome to you!

"The person you are waiting for will try to give you the same warm, friendly reception he, himself, would expect to receive.

"While you are waiting, we would like to have you know something about us. If you do not have to wait, please take this along with you and read it later."

BILCO follows the Connecticut tradition in yet another respect. Its chief product is the result of a tinkering Yankee's ingenuity.

The company's promotional literature says that it manufactures "America's best basement door." And a growing number of folks throughout the country appear to agree, since Lyons expects his business will top the \$1,000,000 mark in 1955. It fell only a little short of that mark in 1954.

It also makes a weather tight, leak proof roof scuttle for schools, hospitals, industrial and business buildings, along with a water proof sidewalk, floor access and pit door.

But its chief product is the basement hatchway for dwellings on which it will spend a good slice of its \$100,000 promotional budget for the coming year.

Although BILCO attained its maturity only in the last decade, the venture actually had its beginning back in 1931 when Lyons, unhappy over the constantly recurring expense of repair-

ing and maintaining the wooden basement entrance to his home, decided to do some thing about it.

At that time, he was engaged mainly in producing architectural and ornamental iron work such as stairs, fire escapes and railings, a trade in which he served his apprenticeship in his early teens.

After a bit of experimenting with a braking press, welding torch and some 12 gauge sheet steel, Lyons formed the prototype of his replacement for the wooden hatchway which demanded so much attention. When the finished product was sprayed with a rust inhibitor and given several coats of paint it made an attractive as well as an efficient replacement.

If Lyons was pleased with the result, so were neighboring property owners and some builder friends. What followed is a familiar story to Connecticuters whose ingenuity has enabled them to "build a better mouse trap." But it was a little slower than most in developing. A depression and a world war intervened.

But, says Lyons, "we managed to hang on," keeping a small working force busy with available materials. Sometimes, he recalls, his working force consisted chiefly of himself and one or two of his sons.

During this period, however, Lyons patented certain features of his basement door—its safety catch, spring lift, flanging and its "knock-down" feature. His foresight has literally given him the field to himself. He has had imitators, but they have ceased to be a problem.

(Continued on page 55)



HERE cartons containing Bilco basement doors are stored, ready for shipment.



PARTS of the Bilco Door are packaged, ready to be easily installed by one man.

CAREER OPPORTUNITIES HIGH



THE NEW BOOKLET outlining good career opportunities for young people in Connecticut industry was the recent subject of a television interview on WNHCTV. Two of the participants, Dr. Finis E. Engleman, State Commissioner of Education, left, and Sherman Knapp, president of the Connecticut Light & Power Company, center discussed the booklet with Joe Francis, master of ceremonies of the weekly "Electric Show".



SHOWN AT DEBUT of career publication, James T. Coatsworth, Edison Electric Institute; Howard W. Memmott, Connecticut Light & Power Co.; Dr. Estelle Feldman, New Haven vocational guidance director, and Hubert C. Hodge, West Haven Buckle Co.



HAMDEN HIGH SCHOOL receives its supply of the booklet, "There's a Career for You in Connecticut Industry" from Tracey Fabian, area development consultant for the United Illuminating Company, center.

CHTLED BY UTILITY COMPANIES

GIVING Connecticut youth a full picture of the many fine career opportunities available in Connecticut industry, and trying to keep our young people from migrating to other industrial areas are continuing challenges.

Now, four Connecticut electric utilities are making headway with a project that is sure to play a forceful part in the overall state effort to counter these problems. The companies are: The Connecticut Light and Power Company, The Connecticut Power Company, The Hartford Electric Light Company and The United Illuminating Company. Their combined service reaches over 90 percent of the state's population.

The key product in the utility undertaking is a 36-page booklet entitled, "There's A Career For You In Connecticut Industry", which was perfected after a year of careful research and planning.

During its production, representatives of the power companies had the counsel of leading educators in the state, as well as the advice of the State Department of Education, the State Department of Labor, the Connecticut Manufacturers Association and the National Association of Manufacturers.

With each chapter prepared by someone actively associated with a Connecticut plant, the booklet gives a thumbnail analysis of 26 career fields which offer good chances of advancement.

Each of the authors is an individual who has himself attained success and standing in his field.

This technique, according to the educators who helped organize the contents gives the job descriptions the value of coming from people who can speak from practical, day to day experience.

The object of the utilities was not merely to perfect an interesting and effective publication and publicize its availability, they stress. They felt it was important to bring the booklet to the attention of industry and school leaders, and to direct distribution so that it gained the maximum benefits.

The results to date indicate they're on the right track toward achieving both objectives.

The prior consultation with high school guidance leaders indicated that the sophomore group was probably the most logical one to reach. This differed with the sponsor's original opinion that seniors were the best potential recipients.

"School authorities emphasized that at the sophomore age students are just beginning to form serious ideas regarding their future occupations. This kind of aid would be extremely helpful at this stage," a statement from the utilities point out.

"They also told us that in spite of the many guidance materials available, nothing in their reference items duplicated this kind of medium," the utility statement added.

In the plan of distribution, now in progress, every high school sophomore in the areas served by the company is being given a copy. Additional copies are being presented to the schools for in-class study. More than 30,000 copies have been distributed, in keeping with this plan.

To give industry and education throughout Connecticut a preview of the project, this fall, the companies sponsored four area meetings around the state.

At these gatherings, leaders of both groups gave serious thought and discussion to the entire subject of school and industry cooperation, in striving for a permanently-sound economy.

The announcement of the plan for giving out the publication was a strong highlight of the sessions and also served as a springboard for giving the public an idea of its proposed uses.

Keynote features of these gatherings were addresses by Dr. F. Kenneth Brasted, director, education department for the National Association of Manufacturers and Dr. Finis E. Engleman, State Commissioner of Education, and Dr. William H. Flaharty, State Deputy Commissioner of Education.

The presidents of the cooperating electric companies also participated as speakers, and made the first public announcement of the career booklet and

its future place as a guidance-class device.

News of the program won highly favorable comment from the large audiences attracted to the meetings, as well as good, supporting press coverage.

Fields covered in the text, and their spokesmen are: "Personnel", T. R. Downs, Pratt & Whitney Aircraft, East Hartford; "Product Design", R. E. Smith, The A. C. Gilbert Co., New Haven; "Factory Operations", Carl M. Omark, American Screw Co., Willimantic; "Mechanical Engineering", Raymond B. Starbuck, Electric Boat Co., Groton; "Industrial Nursing", Mrs. Doris E. James, R. N., Pratt Read & Co., Ivoryton.

"Electrical Engineering", Russell G. Warner, United Illuminating Co., New Haven; "Traffic", James B. Griffin, Scovill Manufacturing Co., Waterbury; "Purchasing", J. Andrew Ulrich, Pitney-Bowes, Inc., Stamford; "Business Research" Allan L. Burton, Veeder-Root, Inc., Hartford; "Production Control", Robert E. Carroll, The Arrow-Hart & Hegeman Electric Co., Hartford; "Sales", Rodman W. Chamberlain, The Stanley Works, New Britain.

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"Industrial Safety", Charles R. Benson, The Armstrong Rubber Co., West Haven; "Office Operations", Louis J. Schuster, Chase Brass & Copper Co., Waterbury; "Time and Motion Study", George B. Lewis, Royal Typewriter Co., Hartford; "Advertising", George Morrison, The International Silver Co., Meriden; "Tool and Die Making",

(Continued on page 53)

The Application of Standard Data To Office Incentives

By W. GILBERT BROOKS, *Chief Time Study Engineer*

Pitney-Bowes, Inc., Stamford

This article adapted from a recent address given by Mr. Brooks at the Third International Methods-Time-Measurement Conference at Hotel Statler, New York, is published in the hope that some of the case studies cited may assist other companies in development of their own office incentive programs.

THERE has been recently a great deal of interest created by the word "Automation". It conjures up a picture of entire plants grinding out finished products without a single operator. Behind this picture I see thousands of office workers laboring each day to fill out, type, analyze, chart and prepare all of the necessary paper work to keep this hungry giant going. If this, then, is the shadow of things to come, now is the time to begin to explore and plan for getting the utmost efficiency from our office workers.

One of the most effective means we have found for increasing industrial workers' efficiency has been to measure the work being performed, establish standards for output and pay for increased productivity above these stand-



W. GILBERT BROOKS



CHARLES ANDERSON, supervisor of Office Incentives at Pitney-Bowes, time studies Nancy Lucashu, a transcribing section typist, with clip board and stop watch.

ards. Since our experience has taught us that this approach is sound and does work, we are in a position of being able to do the same thing for our office workers.

Since Pitney-Bowes has had some experience in measuring office operations for incentives, I hope that this report of our program may help other companies realize the potential value of a similar program.

Our office incentive program was conceived in the late months of 1948 when it was decided to extend the benefits of incentives we had experienced in our plant to the office employees. In reaching this decision we recognized that many groups of office workers could not be directly measured. However, we felt that the gains to be made by setting incentive rates for those whose work could be measured would benefit all employees through the increased profits available for our company profit-sharing plan.

The Approach to the Problem

One of the first problems to be faced was how it would be possible for the Industrial Engineering Department, which is a staff department in the Manufacturing Division, to cross company divisional lines. This was solved by reorganizing the Industrial Engineering Department and setting up a Supervisor of Office Incentives with a small staff and assigning him to work with the Administrative Assistant to the Executive Vice President.

We then defined the scope of the office incentive program as "installing an incentive plan based on direct measured standards developed from Standard Data wherever practical, carrying out at the same time methods improvement and standardization".

We also established the following criteria for determining which office activities would be put on incentives. First, there should be a fairly large homogeneous office group; second, the work performed should be fairly repet-

itive and routine; and third, the group should have a supervisor receptive to the idea of incentives. In the light of what we have since learned I feel we would now list our third point as the most important. I'll have more to say on this later on.

The question of what technique to use in obtaining our incentive rates was quickly resolved because we had just completed a program of establishing standard data for our manufacturing incentives and we decided to use this method on our office program. Briefly, what we did was to plan on taking a large number of time studies, properly broken down, and plot our leveled element time values. The standard time was then established using the mode method of selection.

This left us then with one big problem still unsolved, and, in all honesty, it was probably the toughest we faced. We knew that the question of recording time on the jobs being worked and obtaining correct piece counts to match these times could easily prove to be a big stumbling block to the success of our program. We also were well-aware that failure to devise a timekeeping procedure that would provide proper controls without being cumbersome, hard to administer, or costly to operate could easily sour supervision on the entire program.

We sweated long and hard over this and began by tackling the piece count problem first. We finally decided to use the following procedures: For all typed material, an extra copy would be made for timekeeping purposes only. Piece counts would be taken from material received in a standard package from a supplier. Hand counting of the first phase would be used where a series of jobs involves the same material for one or more operators. Weight counts would be taken where completed work could be weighed to give the final count. Automatic counters attached to such office machines as the multilith, mailing machines, tying machines, etc., would be utilized to obtain accurate piece counts.

With the question of how and what to count settled, we then turned our attention to the problem of getting the correct job times to match the correct piece count. We were conscious of the office employee's general feeling that time clocks and job time recorders smacked of the restrictions placed on plant workers. We were certain that there would be a loud protest if we



NANCY makes notation of her performance record.

tried to get our office employees to punch clocks, and, because we have always operated on an honor system for recording daily starting and stopping times, we established our timekeeping system on the same basis. In reviewing the success we have had so far, I'm sure that this decision played a big part in helping us gain the employee's confidence. Office employees are aware that our system recognizes their inherent honesty and they take a great deal of pride in seeing that the system is not abused. It also helped us sell our incentive plan because of this basic difference between office and shop employees. Not that we distrust our plant employees but they have been accustomed to punching time clocks for a long time, their actual production records are tied in with time clocks, and therefore the requirement of clocking jobs on job time recorders is easily understood by them.

We designed a daily performance sheet based on easy computation and quick recording. The form has a space at the top for the operator's name and date. The remainder of the sheet is divided into six columns, the first three recorded by the operator and the last three by the timekeeper. Space is provided for the operator to enter a description of the job and the start and stop times. If the job has a rate, it is assigned a number similar to the normal part numbering system used in production work. If the job is not rated, a brief description of the job is written down in the second column. The piece counts are recorded in the third column.

We have found that a small percentage of jobs in each section defy our rate setting techniques, usually because of an unpredictable method or the impossibility of securing an accurate piece count.

New jobs when added to the operator's work load, are not immediately rated, in order to allow the operator to become familiar with the procedure and job content.

Our daily performance form serves as an accounting for every minute of the working day. We have noted that operators themselves have not always realized the amount of time that has been wasted until they start recording their every move during the day. I believe that we have had some increase in efficiency for this very reason.

The timekeeper's job consists of taking the operator's daily performance form, figuring the elapsed time on each job and posting the time to the appropriate rated or unrated column. The rated jobs are extended by multiplying the piece count by the rate and entering the standard minutes earned on the form.

After the form is extended, each column is added and a total taken to check the amount of working time against the amount of "in-office" time. The total elapsed measured time is then divided into the total standard minutes earned to determine the percent of efficiency. If the total elapsed measured time equals or exceeds the total standard minutes earned, the percentage of efficiency equals 100% or less, and no bonus is earned. If the total elapsed measured time is less than the total standard minutes earned, the efficiency exceeds 100%, and bonus is earned.

Bonus is only earned on the time worked at a rate when efficiency exceeds 100%. We do not have any penalty for continued "below standard" performance, but this might well lead to a transfer to another department where the operator would be better able to perform the work. All time not worked against the rates is paid for at the individual's base rate.

Solution to Psychological Problems

Once we had the mass of preliminary details worked out, we began exploratory talks with department heads in other divisions, and found one department head who was extremely interested in incentives, in fact so much so that he had already devised a work-

measurement system to measure productivity in his own department. He was very willing to have us help him by setting up an incentive plan. The work in this department consisted of transcribing, duplicating, addressograph, mail handling and mail distribution. Together we decided to tackle the transcribing section first.

This first installation proved to be the most important we have made. I consider it so because of the many things that we were able to learn about office incentives. In looking back I can safely say that one of the most impor-

first problem of fear was to take the mystery out of what we were doing. We spent hours talking to operators showing them how we took time studies, how we plotted our element times and how we arrived at our standard elemental time values from all our readings. We showed the employee how methods changes and alteration of work routines would make their work easier and we consistently tried to sell then on giving the incentive program a good try. Once the fear was removed, changes were made more rapidly and without resistance, more

The third problem—lack of sufficient motivation for earning higher pay—proved to be a real stumbling block. The transcribing section consists mostly of young single girls to whom the incentive of extra money did not prove stimulating enough at first. This group eventually realized, however, that substantial earnings could be made on the incentive rates. I rather suspect that one of the girls found herself needing a new dress between paychecks and decided to go to work.

Break-in Allowance Solves Incentive Problem

In any case, we learned one big lesson which caused us to deviate from our planned program in order to get other new sections up to standard faster. We found in the first group, and in all other groups since, that their performances under the non-incentive environment were about 65% of standard. Since our standards as developed paid incentive earnings for performance above 100%, the expected initial increase in productivity came as a great shock to the employees. So much so that many never even tried to improve, feeling that the standard was impossible of attainment.

Our ultimate solution to this was to establish an allowance which cushioned the effect of new incentive rates. We did this by setting up a "break-in allowance". This starts by adding 25 percent to the standard for the first period and decreasing this amount by 5 percent each period thereafter until, at the end of the fifth period, the employees are working on the rates without any extra allowance. The length of each period depends upon the experience factor contained in the job evaluation write up. If one month or less each period is one week; if three to six months, then each period is one month.

This might appear as if we were making a sort of apology for asking the employees to work much harder but we don't feel that way. We have found that the "break-in allowance" provides a sufficient incentive to allow the employees to get up to standard by a gradual climb. We firmly believe that this solution has enabled us to increase productivity at a much faster rate than would have been possible without the allowance.



MABEL NELSON, Pitney-Bowes supervisor of transcribing, checks the work of her staff of eight incentive typists.

tant lessons learned was that there are four psychological problems which must be solved before any office incentive program can be successful. These four psychological problems are 1) Fear of the unknown, due to changes in work methods and the alteration of work routines; 2) resemblance to factory work, with its resultant loss of white collar "prestige"; 3) Lack of sufficient motivation for earning higher pay; and 4) Objection to being watched.

Our solution of these four problems required a great deal of time and effort; but, as we later proved, it was well worthwhile.

Removal of Mystery

We had carefully selected the time study personnel making the installation and our approach to solving the

cooperation was obtained while taking time studies.

Honor System Solves Second Problem

We found two solutions for the objection to office work being made comparable to factory work, one of these I have already mentioned—allowing employee's to record their own start and stop times. This provided enough stimulation of pride so that it helped overcome the objection. The other solution was the selling of the idea that for the first time management had a true gauge for measuring just how efficient each employee was. It was very interesting to note that most office workers resent not being able to prove conclusively that they are good workers. The incentive plan provides the needed measuring stick.

Careful Selection Solves "Fear of Being Watched"

The fourth problem—that is, the objection to being watched—melted away after the group became accustomed to seeing a time study representative around the section. I would say that this was due primarily to the careful selection of our time study personnel and to the great effort made in explaining and selling the fairness of the system.

The methods we used to solve our problems have proven to be very effective and since we developed our solutions as we went along it might be of interest to you to know just what results we have obtained. I have consistently mentioned our first installation, the transcribing section, so I think it would only be fair to tell you what has been saved through this installation alone.

Savings from First Installation

The transcribing section originally consisted of 15 employees. Their work amounted to transcribing dictation from cylinder records and was, in a sense, a sort of stenographic pool. Now, 5 years after the installation of incentives, the work load has been increased by 30% and the personnel reduced to eleven. The net dollar savings after deducting the cost of installation, maintenance, timekeeping, and incentive earnings, amounts to \$30,000 per year. Individual productivity is up 45%, and the average weekly earnings of the young ladies themselves have increased 34%, not including their normal pay raises and general salary increases. That's a fine well-earned increase!

At the present time we have a total of 115 office employees working on direct incentives at our Stamford, Connecticut home office and factory. They represent 25 percent of the total of 450 office employees. The following will give you an idea of what type of work we are measuring with our incentive plan.

In the Order and Traffic Department, there is typing work, calculation and preparation of order forms and filing.

In the Duplicating Section, there is typing and preparation of forms to be duplicated. Printing of forms on Multilith, Ditto and Xerox machines. Collating, stapling, binding and padding operations.

In the Addressograph Section, there

is the maintenance and running of lists for various purposes.

In the Mail Section, we have covered sorting, distributing and delivering incoming and outgoing mail. Also running the inserting, folding, letter opening and—of course—our own postage meter machines.

In the Payroll Department, we have covered the complete process of computing and preparing payroll for factory, home office and branch offices and the keeping of records pertaining to payroll accounts. Also the computation of bonuses and salesmen's commissions.

In the Field Consignment Section, there is the maintenance of records indicating location by serial number of all machines and meters in branch offices and in service.

In the Distributing Section, we cover those who receive, open and sort customer's checks for forwarding to Accounts Receivable. Also those who receive "invoices from Billing and separate, prepare tapes and forward various copies."

In Accounts Receivable, we serve those using the Remington Rand "Bookless Bookkeeping" system of Accounts Receivable, and those receiving open invoices, setting up new accounts, application of payments, sending of statements, auditing for collection and taking of periodic trial balances.

In the Billing Section, we serve those typing of invoices not prepared by Tabulating.

In the Sales Records Section, we serve those typing quota and commission statements, and cover the use of bookkeeping machines to analyze and tabulate sales.

In the Branch Accounts Section, there is auditing, checking, summarizing, and preparing statements relative to financial operations of branch offices.

And even in the Advertising Department, we have put direct incentive on the typing of advertising leads and the filling of requests from prospects for sales literature.

The annual savings from all of our office incentive installations now amounts to \$118,500 after deducting the cost of installation, maintenance, timekeeping and incentive earnings. We think this figure speaks for itself when anyone asks if office incentives ever save any money.

Worthy of mention is a "case study" of what happened in our Ad-

vertising Department. It shows how much can be done when there is a real incentive-minded supervisor involved. When we were asked to come into the Advertising Department to set up a plan for its Sales Promotion Section, that department was in the midst of eliminating a sales-checking operation which took the equivalent full time of two of the six girls employed in routine operations. It was also releasing a temporary worker employed to help handle a peak work load then being completed.

Since the section was in the process of adding another job equivalent to the time of a full-time girl (actually bringing back some work that had been "farmed out" to a letter shop), the total personnel which the supervisor figured he needed to handle the new work load was five.

With his excellent cooperation, we installed the rates and in only a few weeks one of the girls left the company for family reasons and did not need to be replaced, while it never became necessary to add a girl to take care of the additional work load brought back in. In other words, the estimated minimum personnel of five girls, under the impetus of the new incentive rates, had been reduced to three. The girls' productivity—or output per man hour—has increased greatly, while their effort expended has increased only slightly, and the average weekly earnings of the remaining three girls is now 20.4% over what they had been earning before the incentive system was installed.

I elaborate a bit on this particular installation because it points out how everybody benefits, particularly the alert supervisor who is willing to take advantage of modern office incentive tools, and thus quickly prove his own ability as an intelligent and human supervisor.

Up to this point I have tried to show you the types of problems we faced because I know they are the same problems which would confront anyone attempting to establish an office incentive program. I hope that our solutions may prove helpful to anyone else facing these same problems.

As I mentioned earlier in this discussion we do not use MTM in our incentive program. This is not because we disagree with MTM, but rather because of a lacking of training in its use. The standard data method was used instead, primarily because our

(Continued on page 38)

Is It "Abracadabra" or a "Mad Rushyan?"

by GERTRUDE C. LUCAS, President

Lucas Mail Advertising—North Haven, Conn.

In this brief article, the author calls attention to frequently overlooked services that can often improve the quality as well as increase the volume of business communications without the morale-destroying effects on staff of repeated demands for "last minute" frenzied efforts to meet a deadline.

HAVE you ever wished that you could mutter "Abracadabra" and see a large mailing disappear before your very eyes? Or mutter "Ala Baba" and see hundreds of routine form letters just vanish from the office? It can be done and with less effort than it takes to say those "magic" words—for all that is needed is to know where to look. A simple phone call does all the rest.

In almost any city, town or hamlet there are numerous shops—known by the simple term of "letter shops". Here are today's qualified helpers trained and ready to aid any office, advertising department or duplicating department of any firm, of any type and of any size, large or small, because here, too, is the equipment, the know-how and the answer to the "Mad Rushyan" problem.

At one time the "letter shop" was just a hole-in-the-wall, cluttered, messy shop haphazardly operated but today through membership in such national associations as the Mail Advertising Service Association and the Direct Mail Advertising Association those same shops have gained a rightful place in the sun. The modern shop stands ready with the latest and best of equipment, a complete knowledge of "Postal Problems", efficient service and a sincere desire to SERVE each and every client efficiently, accurately and to the best of its ability.

Take for instance the most reasonable of all duplicating. . . MIMEOGRAPHING—regardless of how much one tries to sell this service by just stating that word, it can't be done. But today's modern mimeographing is so far superior to the hard-to-read,

half-printed copy of the olden days that it compares as day and night. Film is used to give clean sharp impressions. Water base quick-drying inks eliminate the back of the sheet set-off while fifteen beautiful colors adds life to the copy and the complete even inking control assures a very clean cut inexpensive form of duplicating which, in some instances, is hard to detect from photo-offset copy.

Another form of mimeographing which is rapidly gaining in popularity is the new electronic stencil cutting process. Here the fine line drawings of a draftsman can be duplicated by mimeographing without TRACING. Almost any copy up to 8½ x 14 can be

reproduced in clear, sharp duplication because the copy is "scanned" by an electronic eye and the image is transferred to a plastic stencil ready to run thousands of copies. Illustrations, forms, solid lettering are only a few of the ways the modern shop is now servicing their clients with this, the latest and most reasonable form of duplicating—MIMEOGRAPHING.

Another form of duplicated letters is Multigraphing—ideal for thousands of form letters and yields itself exceptionally well for "filled-in" letters. This service is an old stand-by and a pride to the well-equipped letter-shop.

No doubt photo-offset and letterpress are very familiar terms to all, but how many know that today's letter-shop features these services or has a definite place where they can secure fast efficient service for their clients because of the quantity of orders placed.

The third and by far the highest form of all duplicating—the all individually typed letters, is known as "Autotyped". In this instance each and every letter is typed on a regular typewriter yet automatically and at greater speeds than any typist in any office. Letters duplicated by this method are so personal that even in the middle of the second paragraph the name of the person to whom the letter is written can be inserted. Here you have the A-1 letter to those A-1 clients. Autotyped letters are absolutely perfect because the basic body of the letter is cut on a roll similar to an old type player piano roll. And so, it's "Abracadabra"—the list of clients is given to the letter shop and the work is in progress without interruption of regular typists in the office, and without strike-overs, without erasures and without misspelled words which are so common when even an expert typist tires from the routine copying of form



GERTRUDE C. LUCAS, owner and operator of Lucas Mail Advertising, who originated the business in 1950 with an idea, a typewriter and a \$10 deposit on a second hand mimeograph machine.

letters this first class job is done. "Abracadabra"—the roll is placed on a machine—then lo! and behold! the keys of the typewriter move up and down without the touch of a human hand—magic you say—well so may it be. In the body of that second paragraph "Mr. Jones" name is mentioned and at this point the machine stops—the operator takes over and types in the name and again presses the button—again magic, until the letter is complete ready for signing. Signatures are "forged" by pen and ink and the letter is ready for mailing without one bit of strain on the office force.

So far this article has dealt only with duplicating—but what happens when the "Mad Rushyan" invades the office with a large direct mail campaign. Call all the help from the office boy to the President and sit them all down stuffing and licking envelopes—No—Not That! Again "call the letter shop", for here again is the know how of handling third class mail in a first class manner, whether it be a one time mailing requiring a one-time typing or periodic mailings and list to be placed on plates. Automatic addressing requires a complete control on the lists to be used and these lists can be kept in first class mailing condition only if they are in the hands of a well chosen letter shop, because regardless of how the office files are kept the mailing list is at all times kept ready and waiting for your direct mail campaign at a moment's notice. High speed machines are put to work to serve without the clients purchasing, maintaining, insuring or depreciating these high cost machines. Nor do you have valuable space occupied by idle machines, nor the cost of keeping high salaried operators on the payroll. Thus money is saved by taking advantage of this superior service letter shops offer.

Another exceptional service is that of Mailing Lists. Many shops are in constant touch with the largest mailing list houses in the United States. They have the knowledge and the know-how to secure specialized lists either on rental or purchase. Many maintain certain often-used lists in their own office. For the use of these there is seldom a charge made for the list and the only charge is for the addressing.

So whether it is the idea, the know-how or the duplicated product, letter shops include all in their service to the small as well as the large business at reasonable service fees.



GRAPHOTYPE DEPARTMENT, where name address plates are being embossed on plain 1" by 2" zinc strips of metal.



VIEW of Speedamat addressing machine being manually operated, but which can be assembled for automatic operation at speeds of from 4,000 to 6,000 per hour. In foreground is addressograph "B" frame addressing machine which can be operated manually at speeds of from 1,500 to 1,800 per hour.



SHOWN AT THE RIGHT in this photograph is the latest mimeographing equipment. Policy size duplication using the silk screen process, which can duplicate in 15 colors and up to 14" by 17" in size.

Finishing The Foundation . . . Starting The Superstructure

By D. HAYES MURPHY, *President*
The Wiremold Company, West Hartford

Editor's Note: C I publishes this digest of the remarks of Mr. Murphy at a recent Service Award Luncheon given by the Wiremold Board of Directors to the company's employees who had service records of ten or more years, with the thought that its content may be helpful to other executives who may wish to outline their company's objectives to their employees in simple terms charged with genuine sincerity. More of this plain talk expressed in conversational terms in all Connecticut plants would do much to build the faith of employees in management and greater confidence in the merits of our type of economy.

FRIENDS and Fellow-Workers: The Board of Directors have invited you here because you have been working with us for ten years or longer—some of you for much longer.

You have been working with us to build a grand institution—one that will endure and serve a good purpose.

To be sure, we have thus far succeeded in building only the foundation . . . but it is a good, solid foundation and I am grateful to have lived long enough to see it completed.

The superstructure is now beginning to show above ground.

People who have put ten years or more of honest service into a Company like ours have a right to feel that they belong to that Company and that the Company belongs to them.

You have put more into your jobs than just time, and you have earned something beyond your regular pay:

You have earned the respect and friendship of your fellow-workers.

You have earned the right to know something about the traditions, the policies, and the objectives of our Company.

You have earned the right to know how those traditions, policies, and objectives are to be carried on—and by whom.

I'm going to tell you . . .

This business was established in 1900 for the purpose of giving me an opportunity to make a living for myself and for my family in case I was fortunate enough to have one.



D. HAYES MURPHY

Now—54 years later—I have three daughters and two sons in the prime of life, with families of their own. And, thank God, they are all good citizens.

They have known The Wiremold Company and its problems since childhood.

They know that in order to get something out of a business, you have to put something into it.

They know what it means to be plunged to the verge of bankruptcy, and they know the joy of a comeback.

They know all about the awful mistake I made in 1920 trying to make too much money too fast.

And they know that the experience gained by this mistake probably saved

us from worse trouble in the big depression of the 1930's.

They know that the main objective of The Wiremold Company is not to make the Murphy family rich.

On the contrary, they know that a business like ours is a trust . . . to be operated by those in control, not only for the benefit of themselves, but for the benefit of the other employees and the stockholders.

They know that if we do a good job, there will be enough for everybody's need, and they know that there can never be enough for anybody's greed.

With their background and experience, who could be better qualified and what could be more logical than that my sons and daughters should be entrusted with the responsibility of carrying on the traditions, the policies, and the objectives of our Company?

Speaking for the Board of Directors, I can assure you that every member appreciates that the greatest asset of our Company is Good Will. Good Will cannot be bought—it must be earned.

Good Will means people, and you are the people who make up one of the great sections of our Company's Good Will.

Every member of our Board appreciates what it means to have the Good Will that is represented by the service which you men and women are giving to our Company.

Every member of our Board is grateful to you for your loyalty.

The members of our Board jointly and severally pledge themselves to continue to direct the affairs of our Company in the best interests of the people who work here and in the best interests of the stockholders.

Beyond this group, I see in my mind's eye other sections of Good Will. I refer first to that grand team of Wiremold men in the field. Many of them have been with us for a great

(Continued on page 54)

Connecticut Industry's Career Building Opportunities For Youth

Brief of An Address

By Dr. F. KENNETH BRASTED

Director, Education Department, National Association of Manufacturers, delivered at Conferences on Connecticut Youth for Connecticut Industry, October 18-21, 1954.

Editor's Note: In this address Dr. Brasted has outlined a pattern for education—industry cooperation which, if practiced, is capable of producing both economic and spiritual dividends that together will build a stronger state and nation.

UP IN the hill country lived quite a large family. Each year brought its newcomer, and sometimes two or three. Since family revenues were not high, food had to be rationed a little, and hand-me-downs were the order of the day. It got to a point where the older ones got a little resentful at the continued arrival of newcomers to share their pittance. The spirit quickly communicated itself to the young ones.

One day, the army happened that way on manoeuvres and dropped a great number of parachutists. They could be seen floating down all over the sky. Little Willie rushed to his father.

"Hey, Pa!" he hey-pa-ed, "Get your shot gun and come-a-runnin'."

"What's the matter, son?" the father asked, in surprise.

"Quick, Pa. There's no time to lose. The stork's sending them full-grown!"

Now, while the stork isn't yet sending them full-grown, he is setting quite a production record. Four million babies in 1953, the most ever. That's 11,000 a day . . . 458 an hour . . . more than 7 a minute. At this rate of population growth, the United States by 1975 should see over 200 million people, people who should be able to enjoy a vastly higher standard of living.

Our standard of living will rise because of great advances in television, electronics, atomic energy and the like. The really great phase of the technological revolution lies ahead, not behind us. Most important of all, we must realize that it is going to take



DR. F. KENNETH BRASTED

some very skillful planning on the part of business and industry to take full advantage of the almost unbelievable potentialities for growth.

Without the world's finest system of education we would not be on the threshold of such a wonderful future.

What can we expect Connecticut's place to be in this future?

First, let us start out by recognizing that Connecticut is truly representative of the country's industrial states. Connecticut, too, is a state where the battle for free public education was early fought, along with Massachusetts, because of industrialization. It is a state which has had both excellent educational leadership and excellent industrial leadership which gave maximum opportunity for the education-industry cooperation that has since developed. This type of leadership is still with you.

Although 46th among the states in size, Connecticut is first in having the largest proportion of industries which outrank the production of similar products in other states. The manufacturing companies of Connecticut represent 334 different classifications of manufacturing out of a total of 446 in the country, or some 75 per cent.

Connecticut has been the cradle of invention in the United States. The quality and quantity of inventions have been high. Today there are 5,400 people directly engaged in research in Connecticut, with 50 million dollars a year being spent on research.

I believe that industry—not only in Connecticut but throughout the nation—now, more than ever before, accepts the thesis that in order to provide its necessary services to society it must actively support—financially and through personal services—all education, both public and private, and at all levels, not only to secure the personnel it needs to carry out its work, but also to assist in solving those non-industrial problems created by its own activity and growth.

Connecticut hasn't the abundance of natural resources of much of the rest of the country—not even uranium in sufficient quantity for practical commercial use, nor in sufficient quantity to encourage speculation until every one loses his shirt. The land, however, is rich and fertile; the sea is easily accessible; and there are excellent railroad and highway facilities to serve the industry of the state; and power is generated in ever-increasing quantities to supply the needs of a growing population.

State's Future Depends On Youth

You and your predecessors have used these natural resources wisely and

economically. But the natural resources would have been without value these many years without the one factor that we must concern ourselves with to a much greater degree. That is the skill, the intelligence, the loyalty and the desire to have an ever-higher standard of living that has marked the Connecticut worker. You have invested most wisely in people. This you must continue to do. The workers, in the past and at the present time, have been responsible for carrying out the ideas of the inventors. They have used the tools provided to them by industry to increase productivity while manufacturing the highest quality.

But, we must consider at this time that the future of the State depends on those who are now matriculating in colleges and high schools—yes, even those who are entering schools for their primary training.

Those people, the youth of Connecticut, must be helped to determine their individual futures in Connecticut.

They must be told that there is opportunity here in Connecticut. They must learn that no matter what their aim is in life that it probably can be satisfied in this State.

Fortunately, this story to be told is being acted out daily in almost every community—large and small—but we can't just assume that people look at the things that are so obvious.

We must impress upon our youth the advantages of our diversified industries and the promise of jobs that fit the ability of each individual.

Trite as it may seem, we could do worse than point to the living conditions that prevail in Connecticut (the living standard in Connecticut has varied from first to fifth place among the forty-eight states in recent years, and has remained above the national average for over fifty years); the ease in commuting to work and the splendid suburbs of fine cities equaling anything that any city in the United States can offer.

Connecticut youth is another product of Connecticut, and just as the manufactured products are the best—so is Connecticut youth. They have been steeped in the tradition of this area; but, I repeat, it is essential that youth be informed that they have a future—and a good one—in Connecticut and that the future of Connecticut depends on them.

Industry has perhaps the greatest investment of any group in the youth of the State. It is, therefore, of ad-

vantage to Connecticut industry itself, to the State, and to the youth of the State to keep Connecticut students in Connecticut after their formal or regular schooling is completed.

Pre-Employment Training Important

For the rest of my allotted time, I want to share with you some of my thinking and concerns about those youngsters who, after spending a number of years in school, finally find themselves in their first job in industry or business. Most of them enter upon the responsibilities of that first job with a feeling of insufficiency as far as their competence is concerned, but with a good feeling of, "now I am starting on my career."

In the interests of time, I am going to talk with you about just two or three things that in my opinion need emphasis in school, and which require active participation and cooperation by industry and business. I hope my failure to mention some things which in your mind may be very important in the school career of young people will not lead you to feel that I minimize their importance. What I say applies to all young people entering industry or business, whether they come to you directly from high school or from college.

First, I would like to talk about the students' careers in school just prior to their leaving school to go to work. And remember, we in industry and business absorb a large number of young men and young women, whether or not they have been trained to enter employment with the kind of competence we desire them to have. Remember, too, statistics show that of all the young people who enter the first year of high school, some 50 per cent of them never complete the last year of high school. They go to work.

If young people are to make the transition from school to job without misunderstandings, jarring experiences, and dissatisfaction on the part of both employer and new employee there must be a vastly improved Pre-employment Training Program for them. Too often in the past—and even today for that matter—too many industrialists have felt that pre-employment training is the sole responsibility of the school, or perhaps the home; that it is time enough for industry to be concerned when the boy or girl leaves school behind and becomes a name on the payroll. But believe me, both the new

employee and the employer start with a strike against them if industry has not been an active partner of the school in a Pre-employment Training Program.

What, then, should be included in such a program?

First of all, there should be a good vocational guidance program for in-school youth. It should be a long-range program starting in junior high school and continuing throughout the secondary school. No one or two plant tours a year will suffice. A pep talk by an enthusiastic junior executive or a field trip with free hot dogs and cokes, will not give young people any real idea of what it means to punch a time clock on the stroke of eight or nine and work efficiently and productively for seven or eight hours, five days a week. Neither will just assigned reading, and class discussions led by the most well-informed instructor, really condition boys and girls for the actual demands of their first jobs. However, many companies and associations have produced excellent booklets and a few audio visual aids which are effective vocational guidance material. More honest and factual material of this kind is needed and it is welcomed by the schools. Educators almost uniformly agree that the schools cannot provide sound and broad vocational guidance without participation by industrialists, businessmen, and professional men.

Vocational guidance in high school is one of the most important phases of the Pre-employment Program, and it is one which each industry and profession and business or trade association should recognize as its responsibility. What printed material is available? How current is it? Is it honest and unbiased, so that the schools can and will use it, or is it "propaganda?" The alert school man or woman is not going to accept and introduce into his guidance work, just anything that is sent in. It has to be objective and valid, and it must fit into the curriculum.

A second phase of the Pre-employment Program is the work-study programs. When students actually spend part of their time working on a job, either in a cooperative training program or as an apprentice, they gain first-hand experience. They know then what an occupation calls for, whether they like it or not, whether they wish to make that field their life's work. A work-study program presupposes

sound vocational guidance. The student has read enough, and heard enough about some business, trade, or occupation to believe that it is the right one for him. Perhaps he knows someone who is happy and seems to be making a good living as an electrical repair man, or as a mechanic. If, while he is still in school, a work-study program can be arranged, young Jim should know before the end of the first semester whether he has the particular type of mind and the manual dexterity required of an electrical repair man or a mechanic. He may find that he lacks the patience, or that precision and absolute accuracy are not his forte after all. It will be much easier for him to change; and the employer will not have invested too much time and money in his exploratory training period, if by the end of the semester they both agree that some other occupation would be better for Jim.

Work-study programs, or any type of in-school work training, cannot be carried out without close cooperation between employer and school officials. The schools must adhere to academic requirements; the work experience must be arranged so that it does not short-change the student educationally. But any alert or expanding business or industry may well consider cooperation with the schools by providing part-time work for young people who will actually be in training for the full-time jobs they will hold when school days are over. Work-study programs are described in detail in our publication, "Working Together."

A third phase of the Pre-employment Program is less tangible but none the less important. It lies in the realm of understandings and attitudes, and an appreciation of the importance of the whole field of business and industry. The American economy moves on the wheels of industry, and our American way of life is not conceivable apart from the development and contributions of industry. There should be a place for clarifying, beyond any possible misunderstanding, both the inexorable economics and the magnificent contributions of industry. Only by participating in that Pre-employment Program can industry hope to make its voice heard, and its viewpoint understood. Youth must learn the fundamentals of economics; for example, that progress involves risk—you can't steal second and keep your foot on first. Or that if Washington

eventually gets around to taking the shirt off your back, they'll have no trouble finding a bureau of some kind to keep it in. Our HOBESO program ("How Our Business System Operates") is a useful addition to the high school curriculum in this regard.

They should learn, too, that job competence is job security and that job pride leads to job competence. No one questioned that axiom back in the days when trades and occupations moved from the home to the factory, nor in the amazing era of expansion which followed. Somewhere along the line, though, in more recent years, a siren thread has appeared in the sturdy warp and woof of our industrial pattern, weaving in the alluring idea that "the world owes me a living."

How can these desirable objectives be achieved? More active participation in the guidance program is one way. If, on the local level, industrialists are in continuous touch with school authorities, endeavoring regularly to participate in guidance work instead of coming forth on one well advertised "Career Day" with a shot of adrenalin, it should be possible to restate forcibly the precepts which we believe are fundamental. More active participation in non-school youth activities is another way. Not anywhere near enough industrialists and businessmen take an active part in the Junior Achievement movement, in Boy Scout work, Boys' Club Work, recreational activities, or hobby activities. Every contact with our "future industrialists" can be a means of acquainting youth with the opportunities industry offers—and the requirements and the responsibilities of an industrial career.

Let us suppose, now, that in some ideal local setting schools and industry have together worked out a Pre-employment Program for youth which both agree is sound and should prove beneficial. The next step finds the boy or girl at the employment office, and then starting his first job.

Proper Induction Necessary To Job Satisfaction

What sort of an induction plan should a socially responsible organization carry out? Is it enough to show the new employee where the cloak room and lockers are located, how to get to the wash rooms, and where and how to punch the time clock?

Every business and industry has its own story, and its own goals. It is attempting to achieve something worthwhile—something more than

added production and increased sales, let us hope. When the new employee is taken to his work station, whether it be a desk or a machine or a sales counter, he should be shown how to perform the operations of the job, of course. That is the recognized responsibility of supervision, and "if the worker hasn't learned, the trainer hasn't taught" should still hang as a motto in every supervisor's office. New workers are nervous and self-conscious. One explanation may not be enough, and the necessity for re-telling does not automatically mark the beginner as a slow-learner. But teaching the job operations and showing the newcomer how to get from here to there, is not induction.

According to the dictionary, "induction" is the process of reasoning from a part to a whole, or of arriving at a general conclusion from particular cases. Another dictionary definition is "installation."

Many of you have been installed into office in a lodge or brotherhood. Even in a high school Student Council, those who hold top office generally have first served on committees and have been elected to minor offices. Should the induction of a new worker into an organization receive less consideration? The company is investing thousands of dollars in that new employee. His installation should be accompanied by as thorough preparation for the responsibilities and performance of job duties as installation into some office in a social, civic or fraternal group. How else can he be expected to "reason from a part to a whole?"

Induction must be more than a half-hour lecture by the personnel officer. It is a continuing program, carried on through job adjustment and on-the-job training. Where the personnel officer stops, the supervisor must pick up and carry on. That point naturally, differs in individual plants. In most places, it is the supervisor rather than the personnel officer whose influence and attitude affects the attitude and reaction and job performance of the new employee.

Probably no one single thing is more important to the newcomer to the world of work, than his relationship with his first supervisor. The personnel officer may have explained that this company is striving to manufacture the best soap, or the highest quality furniture, or the finest mouth organs. If the supervisor doesn't seem to be

doing that, or helping the men under him to do it, what reaction can you expect?

It is highly important that the new employee find his right place in the organization. The job he applies for, or the first assignment he is given, may not be right for him. It does not necessarily follow that he should resign or be dismissed before the end of his probation period. The supervisor or personnel director should, perhaps, look further. When job and man do not match, there is loss to management and a hard time ahead for individual. If the new employee was worth hiring in the first place, an effort should be made to utilize the values he has for the company in a way that is satisfying to both. It has been said that the degree of "role dissatisfaction" in a plant is an index for determining the health and productivity of the organization itself. "Role dissatisfaction" is like a contagious disease; it spreads. So, for a purely selfish reason, an organization must be concerned about job adjustment and job satisfaction on the part of its employees.

Good induction, good on-the-job training, and job adjustment of new employees must stem from top management. Remember, people can be placed in three classes: the few who make things happen, the many who watch things happen, and the overwhelming majority who have no idea what has happened. You are the ones who have the responsibility to make things happen.

If the personnel director feels that the story he tells newcomers is "eye wash," "baloney," strictly for the birds," he is not going to tell it very convincingly. If the supervisor is being needled constantly for greater production, if "time and motion study" has become more important than the human element, then the supervisor isn't going to do any very convincing job adjustment work either.

Top management alone can sell the idea that its company is actually putting out a better product than its competitors; that good materials are used; that no false claims are made; that from justifiable profits fair wages are paid; that the health and welfare of employees are a real concern to management; that there is opportunity for progress and promotion within the organization. But these things better be true if top management wants them believed. It is pretty difficult to fool

the boys, for very long. And you may be sure the newcomer is going to get some other induction in addition to that which is given by the personnel director and the supervisor.

It may be a long time before the man at the big desk in the office with a carpet on the floor ever sees the new stock clerk. But somebody better see him, day by day or week by week—somebody who will know what kind of a job he is doing, who will watch to see whether he is capable of doing more responsible work, who knows that there is promotion and advancement for workers with ability and the desire to advance. Unless that is the kind of company it is, and everybody all down the line knows it, there is going to be dissatisfaction and job turnover. The bright, capable, ambitious newcomers are going somewhere else, and no one can prevent it except the man at the big desk.

Induction, job adjustment, and on-the-job training are highly important in building morale, cutting down on the hidden costs of waste and poor workmanship and job turnover. It takes place at the bottom of the ladder to just the degree that somebody on the top rung decrees.

Ladders For Advancement Must Be Available

Management's concern for the new employee cannot end with his initial employment, adjustment, and on-the-job training. In a recent Student Opinion poll conducted by Scholastic Magazine, the highest percentage of all students answering were more concerned with opportunity for advancement than they were with job security or even high wages. The percentages were welcome news to those who still believe there is a place in our industrial economy for rugged individualism, individual initiative, and other old-fashioned virtues. 47,000 high school students were polled on what they considered their first requisites of a job. 47 per cent rated "opportunity for advancement" first; 24 per cent rated "future security on the job, regardless of wages"; 12.9 per cent were most concerned with "service to mankind," and 10 per cent voted for "high wages."

Wage increases are important. One can't handle the situation in the manner told about one boss replying to an employee asking for a raise. "Of course, you're worth more than you're getting, Morton. Why don't you let up a bit?"

Yes, wage increases are important; but intelligent and ambitious young people are eager, as this poll proved, for real opportunities. If an organization is going to keep these ambitious youth, it must have a policy of advancement through the ranks, and it must promote continuing education on the part of its employees. Competency on the job must be recognized; ambition to succeed must be encouraged.

Once again, it is top management which must make the plan for employees possible and then make it work. An intelligent personnel director and an able training director can propose and recommend; they can put a feasible plan on paper. They must, however, have the green light from the "Executive Suite" if they are going to do anything constructive within the organization.

Good citizens make a good community and a strong nation. What is more important to an individual than his job: His job decides where he will live, how his wife will dress, the advantages he can give his children. Self-improvement and self-betterment are natural and worthy desires. The worker who finds himself facing a blank wall, in a position where there is no opportunity for improving his living standard, is sure to become a frustrated and perhaps embittered individual—and an increasingly unsatisfactory employee. He will not be a good citizen, contributing to the strength and well-being of his community and his country.

Those of us who believe that America is still the "land of opportunity," that the frontier of yesterday has not disappeared but has been replaced by a new frontier of the industrial plant and the test tube, are obligated to do more than preach. The pioneers who laid the foundations for our dynamic industrial economy were men who did something about their convictions. They cleared the wilderness and planted crops; they mined for ore; they built railroads. Today's pioneers must be do-ers too. It may take a little more doing, as a matter of fact, to inaugurate the kind of Program for Connecticut Youth that we have been talking about than it took to fell trees and build bridges. But what is more important to us as industrialists and to us as a nation than our youth?

Each industrial plant in Connecticut can become a career building laboratory. With enlightened planning, and

(Continued on page 37)



William Flaherty, Director of Guidance, Hamden High School, leads a discussion on opportunities in Connecticut industry

LESSON: Career in Connecticut Industry

Nothing is more important to any young person than the decision involving his future vocation. Any help he can get as he sifts his interests is a service to him. A clear picture of industrial opportunities right here in Connecticut will not only assist a youngster in building a successful career, but will also guarantee a continued source of qualified personnel for growing Connecticut industry.

Today one tangible form of help in this direction is reaching high school classrooms of the state through a booklet, "There's A Career For You In" will not only assist a youngster in building a successful career, but will also prepared by the four electric companies named below, in cooperation with representatives of industry, have been distributed to high school sophomores throughout the state.

We're glad to be part of a project that reaches out in this way to our young people. We think they'll be glad to learn how many places there are for them in a state whose industry is going forward so decisively year after year.

The Connecticut Light and Power Co.

The United Illuminating Co.

The Hartford Electric Light Co.

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A postcard or letter to the Stanley Steel Division, 832 Burritt Street, New Britain, Conn., and a *free* copy of this illustrated brochure is on its way to you. Just write "Steel Folder", or use the coupon, and "What's New at STANLEY STEEL" is yours by return mail.



A DIVISION OF THE STANLEY WORKS

Stanley Steel Division, The Stanley Works
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NEWS FORUM

This department includes a digest of news and comment about Connecticut Industry of interest to management and others desiring to follow industrial news and trends.

A NEW 12-page product bulletin describing the R. W. Cramer Company line of time delay relays has just been released by the Centerbrook firm. Known as Bulletin PB-310, it covers adjustable time delay relays for panel mounting as well as fixed and adjustable units designed for built-in applications.

Cut-away and exploded views provide a clear "look inside" at the Cramer design and application features. Load circuit operation tables, time ranges, dimension drawings and other pertinent information is also included.

The company is a leading manufacturer of precision timing equipment for instrument and industrial control applications.

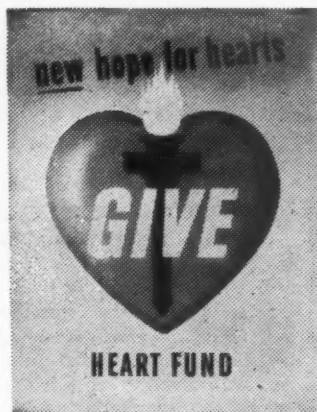
★ ★ ★

THE BOARD OF DIRECTORS of Scovill Manufacturing Company, Waterbury, recently declared a dividend of 50 cents per share on the common stock, marking the 100th consecutive year that Scovill has paid divi-

dends on its common stock. It is the first industrial firm listed on the New York Stock Exchange to reach this record.

★ ★ ★

EVIDENCE of continuing confidence in the industrial future of Connecticut was noted recently by the Connecticut Development Commission,



The Cover



This month's front cover is a photo of Edward F. Lyons, Secretary of The Bilco Company emerging from his basement equipped with a Bilco basement door.

icut was noted recently by the Connecticut Development Commission, when, in a joint statement with Harold F. Kneen, president of the Safety Car Heating and Lighting Co., Inc., of Hamden, it announced that the company has purchased additional manufacturing facilities in Milford.

The new plant, formerly owned by Holst, Inc., is located at the eastern end of Milford adjacent to the main line of the New Haven Railroad. It will be occupied by the company's lighting division which designs and manufactures lighting fixtures for the transportation industry and for special commercial applications.

The Development Commission was instrumental in finding the expansion space for the Hamden concern.

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Short Runs — Long Runs

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EDWARD M. BANCROFT, has been promoted to the post of master mechanic at Hamilton Standard, division of United Aircraft Corporation, Windsor Locks. The post had been vacant since the death of Sigmund A. Czarnecki last March.

John E. Bateman, formerly assistant chief tool engineer, has been promoted to chief tool engineer to fill the position vacated by Mr. Bancroft.

★ ★ ★

YALE & TOWNE has introduced a new, precision built, portable and low-priced key duplicating machine designed to satisfy the wide range of requirements of locksmith shops and the many other types of establishments which cut keys, it has been announced by James D. Young, general sales manager of the Yale Lock and Hardware Division.

Known as the "Keymaster," the new Yale machine can duplicate all pin and disc tumbler cylinder keys including those for automobiles. The machine is also able to duplicate any flat type key, including safe deposit and locker type keys, when a high speed slotting cutter and spacer is used in place of its standard beveled cutter.

★ ★ ★

CONSOLIDATED INDUSTRIES, INC. of West Cheshire, Conn. has just issued a new 20 page, two color brochure on their facilities for producing forgings to customer's specifications. Of interest to procurement officials will be the detailed outline of their facilities, with special emphasis on their ability to produce quality forgings, forgings that are produced to precise limits with an elaborate system of controls to assure that the finished forgings measure up to the customer's specifications as to stress, chemical analysis and dimensions.

Of interest to designers of metal parts are the sections devoted to nomenclature, design layout, die design, tolerance tables, etc.

Copies of the brochure are available from the company.

★ ★ ★

RICHARD S. HESS has just been promoted to the newly-created position of executive director of employee relations at Landers, Frary & Clark, New Britain.

Mr. Hess has been director of industrial relations of the New Britain firm since August, 1949. Landers is



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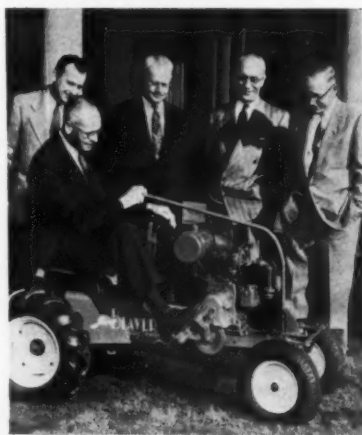
one of the nation's leading manufacturers of small electrical appliances under the trade name of Universal.

In his new position he will report to Bret C. Neece, president, and will be in charge of all activities and functions affecting Landers men and women. He will also serve as a member of the executive management group.

Mr. Hess was graduated from Lehigh University where he received his B.S. degree in Business Administration in 1933.

★ ★ ★

THE BAIRD MACHINE COMPANY, of Stratford, designers and builders of high production machine tools since 1849, has announced that it will take over the marketing of the Beaver Riding Tractor, one of the best known of the smaller four-wheel farm and garden tractor units. Baird has manufactured the Beaver Tractor since its introduction in 1947. Baird engineering and production facilities have been largely responsible for successful development of this machine. However, until recently, the sale of the tractors has been handled by the Beaver Tractor Company, also of Stratford.



LEON WARNER, president, The Baird Machine Company, is shown driving the Beaver Riding Tractor, now being marketed by the Baird company. Standing left to right are Burton F. Lewis, engineering department; Thomas Tobiasen, superintendent; W. L. Hancock, Beaver sales; Frank C. Holmes, sales manager.

Expanded manufacturing facilities will permit a greatly accelerated program in Beaver Tractor production and this will be backed, according to company President, Leon A. Warner, by a sales and promotion program designed to assure the Beaver Riding Tractor leadership position in its field.

CONSOLIDATED MACHINE TOOL CORPORATION, wholly-owned subsidiary of Farrel-Birmingham Company, Inc., Ansonia, has been dissolved as a separate corporation and its business and activities will be con-

ducted as a division of the parent corporation.

The announcement, made by Franklin Hoadley, president of Farrel-Birmingham, and Lester D. Chirgwin, president of Consolidated, stated that

5 requirements of a sound Pension Trust Plan

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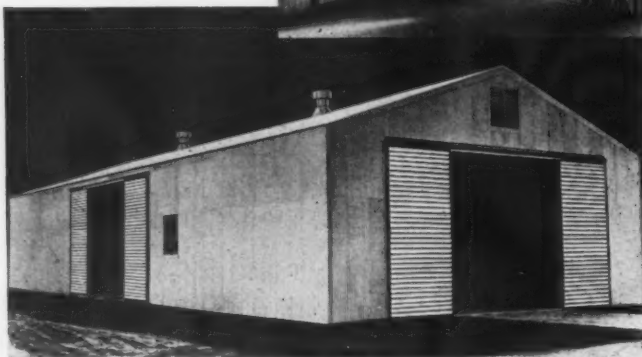
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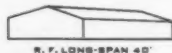
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the new division will be operated as Consolidated Machine Tool Company, a division of Farrel-Birmingham Co., Inc. Activities will continue in the Rochester division as before and management will remain the same.

Farrel-Birmingham acquired Consolidated in December 1951. During the past three years the firm has maintained high production of important machine tools.

★ ★ ★

AT A MEETING of the Board of Atlantic Carton Corporation, H. Clinton Atterbury was elected executive vice president of the corporation. Mr. Atterbury has been with the firm for thirty-two years.

William B. Kingsland and Edward C. Herber were elected vice presidents. Mr. Herber is also secretary of the corporation.

Walter E. Turner, president and treasurer, who is semi-retired, will continue to act in an advisory capacity.

★ ★ ★

C. K. WOODBRIDGE, chairman of the board of directors of Dictaphone Corporation, has been re-elected a member of the National Industrial Conference Board, it has been announced.

The Conference Board, founded in 1916, is an independent and non-profit institution for business and industrial fact finding through scientific research. Its work is supported by more than 3,300 subscribing associates including business organizations, trade associations, government bureaus, labor unions, libraries, individuals, and colleges and universities.

★ ★ ★

A NEW LINE of specific gravity meters for liquid solutions, mixtures and slurries has just been announced by The Bristol Company, Waterbury.

These meters operate by comparing the pressure necessary to displace a given head of the sample liquid in a bubbler pipe, with the pressure necessary to displace an equivalent head of water. The instruments used for this purpose can be calibrated directly in terms of specific gravity, Twaddell units, degrees Baumé or other appropriate units.

Further details are available from The Bristol Company, Waterbury 20.

A COMPLETE ASSORTMENT of home sewing needles in various styles and sizes has been introduced by the Oakville Company Division of Scovill Manufacturing Company. It will be marketed under the well-known trade name, Clinton.

The unique package, which contains 50 needles, features a convenient sliding panel which allows easy access to the needles while providing a permanent place to store them when not in use.

The needles are grouped on a special sliding insert which is covered with a clear plastic material on which are printed the names of the various types of needles for easy identification and selection.

★ ★ ★

THE STATE'S FIRST industrial television hook-up to be used in an electric utility power plant has recently been installed by the Connecticut Light & Power Company in its Montville plant on the Thames River.

The hook-up consists of a television camera, power unit, and monitor, or what is known as a viewing screen. Use of the system now enables CL&P



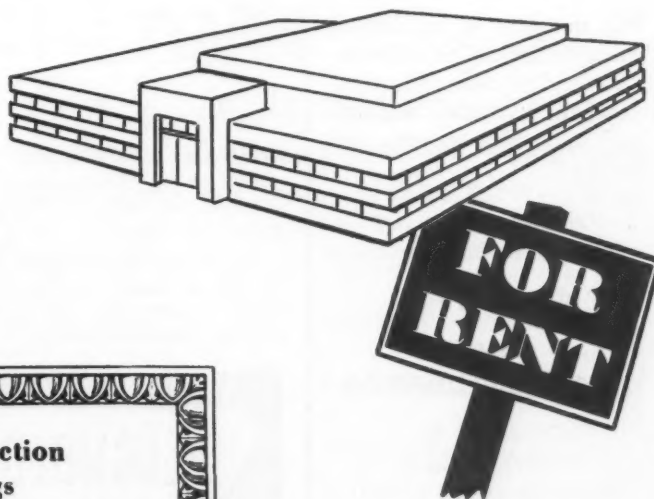
THE INDUSTRIAL TELEVISION system which has been installed at The Connecticut Light and Power Company's Montville plant provides boiler firemen, such as Longin J. Sobanski, left, and Richard E. Hastings, with a clear and continuous view of burning conditions inside the furnace.

to operate one of its Montville boilers with greater economy, control and safety.

The Montville television system is known as closed circuit. The signal is

transmitted along a coaxial cable which connects the camera and the viewer. It is impossible for the picture to appear on any non-connected viewer.

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The television camera at Montville is mounted near the top of a 147 foot high boiler with the lens pointed at a three inch diameter window in the furnace roof. Conditions can be seen down in the boiler's combustion chamber, a distance of approximately 80 feet. The monitor has a ten inch screen and receives black and white pictures. The hook-up allows the operator in charge of the boiler to have a clear and continuous view of the inside of the furnace.

★ ★ ★

ENTHONE, INC., manufacturers of chemical products for metal finishing has announced a change in the name of its division formerly known as Conn. Metalcraft, Inc. The new name will be Comco, Inc. This corporation has been engaged in the design and manufacture of plating racks, fixtures, filters, plastic tanks, ventilating ducts and in the sale of general equipment for the electroplating industry.

Simultaneously, it has been announced that the new division has developed a new series of cartridge type filter units designed especially for the electroplating and electroforming industries. The units are available in a variety of models ranging from 100 gallons to 5,000 gallons or more per hour. An illustrated brochure is available from the company describing these units.

★ ★ ★

JOHN E. COUTTS has been promoted to the position of purchasing agent at The Seamless Rubber Company, New Haven.

Mr. Coutts, who has been a member of the Seamless organization since 1941, succeeds the late William H. Otersen, Jr. Announcement of the pro-

motion was made by J. Lawrence Pond, vice president in charge of purchasing.

Mr. Coutts worked first in the book-keeping department of Seamless and has been assistant purchasing agent since 1945. He is a member of the New Haven and Connecticut Chapters of the National Association of Purchasing Agents.

★ ★ ★

AN ELABORATE new precision machining brochure depicting actual case histories of routine, intricate and seemingly impossible special machining projects recently completed has been issued by Connecticut Mechanical Industries, Inc., of Hartford.

One of the highlights of the catalog is a graphic description of how individual tooling problems were overcome, how minute tolerances were faithfully met, and how CMI saved both time and money for the manufacturer.

Featured also in the catalog is a list of the facilities which have made CMI the largest tool and special machining subcontract organization in New England.

★ ★ ★

TWENTY-SIX employees of Handy & Harman, refiners and fabricators of gold, silver, and their alloys, were honored at a service award dinner recently at the Stratfield Hotel. All are employees of the company's Bridgeport plant.

Heading the list of honored employees was Robert H. Leach, a member of the Board of Directors of Handy & Harman. He completed 40 years with the company last year.

Six employees received awards in recognition of completing a quarter of a century of service with the firm. They are Raymond T. Beaudin, John G.



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Molloy, George R. Montambo, Charles A. Stager, Gustave R. Wettergren and Frank Yacco.

★ ★ ★

CHARLES E. CROWLEY, president of the Alsop Engineering Corporation, Milldale, recently announced to company employees that most departments would start working a '44-hour week. "We are aiming at a 40-hour work week eventually," he said, "because it has been found that the 40-hour week is the 'ideal' work-week in industry from the standpoint of production and cost efficiency."

Mr. Crowley informed employees that certain wage adjustments would also be put into effect at the same time as the reduced work week.

★ ★ ★

A REGIONAL OFFICE has been opened in Hartford by the American Arbitration Association, a national organization of trained arbitrators of labor-management disputes. According to J. Noble Braden, executive vice president of the association, the Hartford office was found necessary because of the increased demand for the group's services in that area.

★ ★ ★

A COMPLETE LIST of state labor statistics covering the years 1938 through the first seven months of 1954 has been compiled and put into book form by the Connecticut Labor Department.

Covered by figures and charts in the book are compilations through each year of employment, unemployment, wages, hours, hourly earnings, work stoppages and work injuries.

Labor Commissioner John J. Egan said the new book was prepared to meet the demand for requests for historical data of the state. These requests, he said, have been increasing in recent years, necessitating an increasing work load. The books are available at the Labor Department's offices on Farmington Avenue.

★ ★ ★

ROBERT P. STACY, vice president of the Connecticut Light and Power Company, has been elected chairman of the Connecticut Section of the New England Council at its annual session held recently in Boston.

Elected vice chairman was Laurence S. Stone of New Haven, general commercial manager of Southern New England Telephone Company and Gra-

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ham R. Treadway, vice president of the Connecticut Bank and Trust Company, was named treasurer.

★ ★ ★

THE SILEX COMPANY, Hartford, has announced the move of its glassware products assembly operation from Hartford to a new branch plant in Muskogee, Oklahoma.

Remaining in Hartford will be the operation connected with the manufacture of plastic and metal components for coffee makers and servers as well as ranges, irons and other metal and electrical products made by the company.

S. M. Ford, Silex President, said that the assembly of glassware products by Silex in Muskogee is "a natural move for the company." He pointed out that nearly all of the Pyrex glass for these products had been shipped from Corning Glass Works in Muskogee for assembly in Hartford.

★ ★ ★

DONALD H. CULVER has been appointed assistant treasurer of United Aircraft Corporation by the executive committee of United's board of directors, H. M. Horner, president, has announced.

The promotion of Mr. Culver, who was divisional auditor of Pratt & Whitney Aircraft division, is one of three appointments announced as a result of executive committee action.

Albert S. Roberts, who held the post of assistant to the divisional controller, of Pratt & Whitney Aircraft has been appointed divisional auditor of that division.

Wilbur Emmons, who has been Pratt & Whitney's facilities accountant, was appointed assistant divisional auditor. Joseph P. O'Brien has been named assistant to the divisional controller, Pratt & Whitney, and William O. Rollinson has been promoted to the post of facilities accountant.

★ ★ ★

DAVID J. CROMBIE has been appointed a vice president of Underwood Corporation where he will be in charge of manufacturing, it has been announced by P. D. Wagoner, chairman.

Since joining the company in 1929 as a mail clerk, Mr. Crombie has advanced through the assembly, engineering, personnel and manufacturing departments. Before his transfer to New York as assistant to the vice president in charge of manufacturing, he

served as assistant works manager at the company's Hartford factory.

A 1938 graduate of Fordham College, he received a masters degree in philosophy and was an instructor there in philosophy for two years.

★ ★ ★

MANUFACTURE of fine-grain phosphor bronzes having better fatigue life, increased formability, and at no sacrifice in yield strength or proportional limit, has been announced by The American Brass Company. The new phosphor bronzes, which will be marketed under the trade name "Dura-flex" were developed by the company's technical and production departments after several years of study and experimentation.

John R. Freeman, Jr., vice president—metallurgy and research for The American Brass Company, in releasing news of the development, said, "We believe phosphor bronze alloys produced in this manner are so far superior to conventional material that they warrant a special name. That is why we are calling them 'Dura-flex'."

★ ★ ★

A NEW SERIES of rotary motor-reversing switches, extremely small for their capacity, has been developed by The Hart Manufacturing Company, it has been announced.

Designed for control of single phase motors up to two horsepower, the new "Diamond H" switches are designed for use with fans, grinders, pipe threading machines, home workshop equipment and other power tools and similar applications.

The new switches are said to be ruggedly built and equipped with spade terminals for easy wiring. Spindles may be extended through the back of the base, if desired, to provide unitized control of louvers, dampers or other equipment or to permit ganging of switches.

★ ★ ★

ACCORDING TO the Commerce Department's Office of Business Economics, Connecticut began the new year with a bigger net gain over 1953 in the number of business firms operating within its borders than all but 13 of the other states.

Every one of these states is larger than Connecticut in both size and population. Connecticut opened the year with 900 more businesses than it had a year earlier. Its total became 63,500, 14,200 more businesses than the state had in 1946.



miller phosphor bronze and trembronze

A new high-speed 4 HI mill, for the production of thin gauge metal from .002 upward, has been added to our Rolling Mill facilities. It broadens our scope of quality metal production—enables us to meet a broader range of individual requirements for Phosphor Bronze and Trembronze.

Personalized Service, and Uniform Quality, have been MUSTS with Miller for more than 100 years of successful metal manufacturing. Backed by a thorough knowledge of metal fabrication problems—the use of only highest grade raw materials—quality control of all processing operations—and careful checking with the most modern testing facilities—Miller Phosphor Bronze and Trembronze have brought praise from users for their high tensile strength, lasting flexibility and uniformity.

Miller Phosphor Bronze and Trembronze are available in strips and rolls, in widths from $\frac{1}{2}$ ". Whatever your requirements, you can depend upon your specifications being rigidly adhered to.

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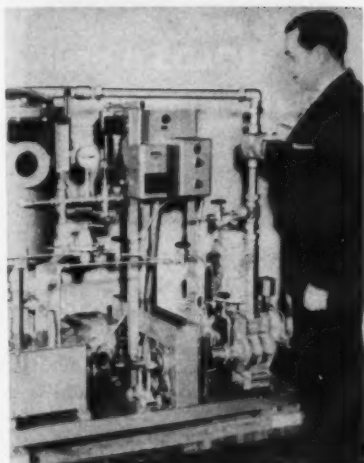
ROLLING MILL DIVISION • MERIDEN • CONNECTICUT



*There's usually
one black sheep in every crowd!*

Employers Need **FIDELITY BONDS**

**THE TRAVELERS INDEMNITY COMPANY
HARTFORD, CONNECTICUT**



THE BOWSER DEGASIFIER, one of a line of oil processing products recently transferred from Fort Wayne, Indiana to Terryville. Denis H. Lopez, project engineer is shown inspecting the unit.

REVERSING a much talked about trend of industry leaving New England, Bowser, Inc. has announced that it is moving its Degasifying and Dehydrating Division to Terryville from Fort Wayne, Indiana.

Manufacture, engineering, sales and advertising of the former Indiana operation will be handled by Bowser Technical Refrigeration Division.

Bowser products to be added to the Terryville plant's manufacturing operations are used by public utilities and industry to clean, stabilize, dehydrate and degasify electrical and other oils.

Herman I. Rudman of Bowser Technical Refrigeration will head national sales for the new line. Denis H. Lopez, project engineer, who has been transferred from the Fort Wayne plant, will head engineering activities.

★ ★ ★

ELIMINATION of usual hand twisting and tinning following the Artos operation in the bonding of stranded conductors is now possible with newly developed plastic insulated stranded wires which can be consistently and satisfactorily bonded during the cutting and stripping process by means of induction heating, according to William Brand & Co., Inc., Willimantic, who conceived and initiated a study which has led to the development of the new wires.

Turbo DD wires, which meet the requirements of the Underwriters' Laboratories and various applicable military specifications, are the product of twelve months' research into the erratic results originally obtained with

the induction heating unit. Tests were conducted at all levels, in the William Brand plant, at the plant of the unit manufacturer, and by users of commercial and military wires.

A bulletin, No. 54-102 has been prepared to give additional information on the process, and is available from the Technical Information Dept., William Brand & Co., Inc., Willimantic.

THE STERLING ENGINEERING

CORP. of Winsted has announced a new expansion program with the acquisition of three new giant Keller machines.

Sterling's constant aim in acquiring new precision equipment is to increase its already diversified machining and tool building services for manufacturers throughout the country.

Among the varied work done by the company has been drop hammer dies for oil well drills, dies for Chevro-

Precious Metals Plated

ON ANY PRODUCT —

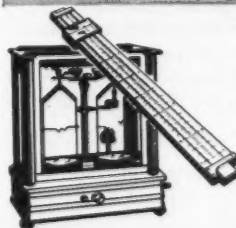
LARGE OR SMALL

More and more of Connecticut's leading manufacturers are learning to depend on Harper-Leader's plating service for any of their parts that require a precious metal finish. There must be a reason for our fast-growing list of satisfied customers. We think one of the reasons is our technical staff — they're recognized experts in the fields of electrochemistry and metallurgy.

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Wiping Cloths**

For Every Cleaning and
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Washed and Sterilized
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let bumper guards, dies for Lincoln taillight and tailpipe assemblies, spars for Sikorsky helicopters, struts for Chance-Vought Navy Cutlass F7U jet fighters, hubs and blades for Kaman helicopters, dies for Pratt & Whitney jet engines, drop hammer dies for Republic Thunderjets, molds for Philco radio cabinets, etc.

★ ★ ★

THE APPOINTMENT of George F. Mayforth as assistant superintendent at the Singer Manufacturing Company, Bridgeport, was announced recently by Lawrence E. Hough, works manager.

Mr. Mayforth joined the Singer company in 1946 as a process engineer. In 1949 he was in charge of re-engineering sewing machine assembly and methods improvement, and in 1953 he was assigned as project engineer on special instrument work. He is a graduate of Carnegie Tech with a mechanical engineering degree.

★ ★ ★

THE ELECTION of Willard H. Sahloff as a vice president of the General Electric Company has been announced by the company.

Mr. Sahloff is general manager of the G-E small appliance division which has its headquarters in Bridgeport.

Mr. Sahloff is a native of Kingston, New York, and a graduate of Rutgers University. He has been general manager of the small appliance division since April, 1953.

★ ★ ★

MITCHELL CHEMICAL CO., Southport, was recently awarded a plaque by the Chemical Specialties Manufacturers Association, Inc., New York, for packaging of "Gun Guard" gun and reel oil.

The firm manufactures a full line of Gun Guard products, including gun blue, rust remover, gun and reel oil and sprays and powder solvents. The industrial products division of the firm is the Mitchell-Bradford Chemical Co., manufacturers of protective finishes and heat treating salts for metals.

The company has recently announced plans to move its plant to Milford, and has already begun construction of a \$52,000 plant on Wampus Lane.

★ ★ ★

THE SALE of Ernst Bischoff Co., Inc., Ivoryton, to Miles Laboratories,

**LIFTS DIRT...
HOLDS IT OFF...**

CINDET

100% ACTIVE 100% SAFE!

NEW LIQUID SYNTHETIC DETERGENT

CINDET can be used in hard or soft water for hundreds of cleaning needs. It LOOSENS dirt quickly, LIFTING IT AWAY AND HOLDING IT IN SUSPENSION in a mass of creamy suds. Removes stubborn stains, rubber marks.

CINDET works fast, dries quickly, can be used safely on anything water itself won't harm—including the user's skin. Use CINDET to strip old water emulsion waxes from floors quickly and surely, AND FOR ALL GENERAL CLEANING PURPOSES.

CINDET is approved by the Rubber Manufacturers' Division of the Rubber Manufacturers' Association.

Write for Dolge literature on CINDET, and have your DOLGE SERVICE MAN demonstrate its easy, economical use.

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Consult us about
GUARDS-WATCHMEN

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Serving "Top" Industries
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**INTERSTATE
INDUSTRIAL PROTECTION CO.**

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EDISON 3-4740

Inc., of Elkhart, Indiana, has recently been announced.

Dr. Edward K. Harvill, Essex, vice president and director of research at Bischoff for the past seven years, said that Bischoff will be operated as a subsidiary of Miles Laboratories and will continue to manufacture the products that they do at the present time.

Bischoff, which has been a family owned corporation, has been operating in Ivoryton for the past 15 years. They manufacture pharmaceuticals which will augment the products produced by Miles Laboratories.

★ ★ ★

DIRECTORS of The Kerite Company, Seymour, have elected Chester R. R. Harris to the post of chairman of the Board of Directors and chief executive, and Theodore O. Rudd, president.

Kerite, now completing its 100th anniversary year, has been a pioneer in the field of insulated wire and cable—first for telegraphic communication and more recently for unusual power requirements of atomic energy plants. Since 1943, the company has greatly enlarged and modernized its plant and equipment at Seymour, and an active research and development department is maintained to keep its products in step with new types of installations for industrial, railroad and power customers.

Mr. Rudd, who becomes Kerite's fifth president, was born at Media, Pa. After graduation from Sheffield Scientific School, Yale University, he spent 18 months as a cadet engineer and worked in the operating department of the Philadelphia Electric Company. He joined Kerite in 1926 as sales engineer, became vice president in 1945, and a director the following year.

Mr. Harris was graduated from Pratt Institute, Brooklyn, as an electrical engineer in 1905, he began work with Western Electric. He transferred to Western Union in 1910, and to Kerite in 1917 as an assistant to President Richard DeWolfe Brixey. In 1927 he became vice president of the company and because of Mr. Brixey's ill health he carried the major burden of its management. He was elected to the presidency in 1943. He also has been serving as treasurer and will continue to retain this position.

★ ★ ★

CHARLES B. HAMILL has retired after 34 years as an executive in the

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YOUR PLATING CHEMICAL NEEDS

Representing:

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Federated Metals Division
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You can save the time, money and bother of "shopping around" for industrial plating chemicals. Rely on ENTHONE . . . a single *local* reliable source for *all your plating needs*, as near as your telephone. You can be sure of prompt, courteous service, and — if required — our staff of Chemical Engineers is available to help with your chemical problems. In addition, as part of our complete service, the Connecticut Metalcraft Division of ENTHONE, Inc. offers you a full line of electroplating and metal finishing equipment and supplies.



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NEW HAVEN

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corset industry in Bridgeport. Until the time of his retirement he was executive vice president of the LaResista Corset Company.

Born in Washington, D. C., Mr. Hamill attended the Rensselaer Polytechnic Institute in Troy, New York, where he received a degree in civil engineering. In 1921 he joined the Warner Brothers corset firm in Bridgeport, marking the beginning of his career in that industry. He took over the LaResista company in 1928. He

has occupied executive positions in that firm and allied companies ever since.

★ ★ ★

STUART A. LOVERIDGE has been named president of Autoyre Co., Oakville, world's largest manufacturer of stamped and polished bathroom fittings. Autoyre is a subsidiary of Ekco Products Co., Chicago.

A life-long New England resident, Mr. Loveridge succeeds Philip B.

Shailer, who resigned to devote full time to his Mexican and Florida interests. The new executive was elevated from vice president in charge of sales.

★ ★ ★

A TESTIMONIAL DINNER was held recently at the Hotel Elton, Waterbury, honoring John P. Coe for his service to the Naugatuck Chemical Division of the U. S. Rubber Company.

Mr. Coe, a vice president of the company and formerly general manager of the Naugatuck Chemical division, is currently on special assignment, having been appointed to handle the company's interests in the negotiations for the transfer of synthetic rubber plants from the government to private industry. Recognized as the company's top manufacturing chemist, his role in the development of the country's synthetic rubber industry made him a natural choice for this assignment.

Mr. Coe began his 41 years of service with U. S. Rubber Co. at the Indianapolis tire plant in 1913, after his graduation from Massachusetts Institute of Technology as a chemical engineer. After some years of service at the general laboratories and other locations, he rose to a position in charge of all tire research and development for the company.

In 1930 he joined Naugatuck Chemical as assistant to the general manager, becoming factory manager in October 1931. He later progressed to the positions of general sales manager and general manager.

In 1952 Mr. Coe received the annual award of the Commercial Chemical Development Association for outstanding accomplishment, one of the highest honors of the chemical industry.

★ ★ ★

THE APPOINTMENT of Norman H. Perreault as manager of the Reliance Steel Division, Eastern Plant, Hamden, has recently been announced.

Mr. Perreault will supervise warehouse operations and continue in charge of the plant's order-service department. He has served in the latter capacity since the Eastern Plant was opened in 1949.




1 in 3

One CMS family in every three had a doctor's bill (for surgery, maternity, in-hospital medical care) paid by CMS in 1954.

In all, six and a half million dollars were paid for 130,000 claims.

And the CMS payment covered the doctor's entire bill for well over half of these Members, because they were entitled to **SERVICE BENEFITS**—an exclusive feature of CMS.

If your firm has CMS, you may be sure you and your employees have the best available protection. If not, full information is available to you. Write or telephone CMS.

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SPONSORED BY THE CONNECTICUT STATE MEDICAL SOCIETY
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Connecticut's Career Building Opportunities For Youth

(Continued from page 20)

true civic spiritedness, industrial executives can work with the schools and social agencies of each community to prepare youth for a career in industry that will be rewarding to the worker, highly satisfactory to management, and contributory to better community, state and national life.

The Pre-employment Program consisting of adequate vocational guidance, work-study programs and the development of necessary and valuable understandings and attitudes is the first step. Adequate procedures for induction, job adjustment and on-the-job training must be available to the youth when he goes into industry after leaving school and college. When he has become a member of industry's team, he then must have post-employment opportunities which will permit him to advance year by year to the fullest extent possible. Granted these factors, Connecticut industry can pro-

vide untold career building opportunities for youth. From beginning to end, the successful creation of these factors depends upon the further development and perpetuation of increased understanding, confidence and cooperation between industry and education here in Connecticut.

You, as leading industrialists of this great State, have a job to do and a contribution to make—and it is in keeping with the tradition of education-industry cooperation long established in Connecticut. It's a day-to-day job—day after day.

Sacrifice will be involved—in greater or lesser degree as the case may be. But the results will prove the worthwhileness of your sacrifice.

Let me conclude with a brief story illustrating this matter of sacrifice.

A pig and a chicken were walking down a street together when they came upon a fine billboard sign advertising bacon and eggs. The chicken was extremely enthusiastic about the sign. The pig looked at it and said—"What's a day's work for you, my dear, represents quite a sacrifice for me!"

Lower Price Only Half The Story



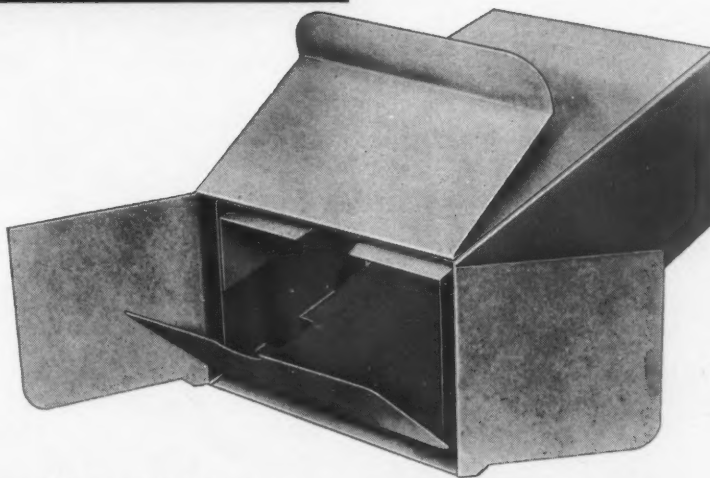
The new Town Hall in Somers, Connecticut was equipped with office furniture from Barney's. According to a member of the Town's Building Committee: "Not only was Barney's able to supply us with the type of equipment we wanted at a lower price, but every courtesy and service was extended to us from start to finish".



Office Furniture—Factory Equipment
450 Front St. Phone JACKSON 2-6221

Once Used—Always Used... Robertson *Cushion Box**

- Double-wall construction prevents breakage
- Packaging costs reduced
- Packaging speeds increased
- Adaptable to two-part products
- Offers special features for display



For FURTHER INFORMATION about Robertson Cushion and Robertson Partition Boxes please write Robertson Paper Box Company, Inc., Montville, Conn.

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does everything

Creates its own patented designs. Makes its own paperboard, dies and inks. Prints, cuts, folds and glues.

its own paperboard, dies and inks. Prints, cuts, folds and glues.

*Robertson Cushion Boxes are made under U.S. Patents 2,513,902 - 2,533,070 and pending applications.

The Application of Standard Data to Office Procedure

(Continued from page 13)

staff was well trained in this method.

However, MTM has been used for spot checking some of our standard elemental times both in the office and in the shop, just to be sure that we were not going in the wrong direction. The overall results of those checks have proven to be quite revealing. We have been able to consistently find a close correlation between our standard data times and those arrived at through MTM.

Concluding Hints On Procedure

In reviewing our office incentive plan with the idea of pointing out what other people about to start on such a program might expect, I find several important points.

Whether to use MTM or Standard Data to develop these standards is a question which decides itself, in my mind, on how well your time study personnel is trained in either method.

Actually I think that MTM and Standard Data will both be required to some degree since so many of the office operations involve a certain amount of machine time.

I also believe that time study personnel accustomed to job shop production problems will find it easier to set up an office incentive program.

I cannot stress enough the need for carefully selecting time study personnel. These people must be the most patient and tactful available. The field of office incentives is still relatively new and few people are familiar with incentive rates, standard hours, etc. They need to be nursed along and educated to understand this strange new language.

In conclusion, let me plug hard for the whole field of office incentives. I make no claim to being an expert on this subject, but I do know from this very real experience that office incentives can and do work well.

The application of office incentives provides a chance for us to make available to the white collar worker the

same advantage the industrial worker has, namely, to increase earnings by increasing productivity, to have some fair and inspiring measurement of his individual worth on the job.

Office incentive plans are one phase of the job we face. Hand in hand must go office methods improvement, increased mechanization of office paper work activities, and the development of good sound human relations programs for the office worker.

We are standing at the threshold of a great opportunity. For the industrial engineer, it represents the "coming of age" which is the normal outgrowth of his success in the industrial worker field. It represents an opportunity for some new and original thinking on his part.

The challenge is given and the results and rewards will be won by accepting the challenge and further extending the contribution of the industrial engineer to the American way of living.

Success or failure? Most of it depends on you.

Small Orders? *Anytime*

Deliveries to Suit

WALLACE Barnes SPRINGS

BRISTOL, CONNECTICUT

WHAT'S NEW AT BRISTOL...



IN SAN FRANCISCO. Control panel at the new Point Richmond Holder Station of the Pacific Gas and Electric Co. The Bristol Metameter Receivers on this panel record readings of flow and pressure at focal points of load in the natural gas distribution and transmission systems for San Francisco Bay section.

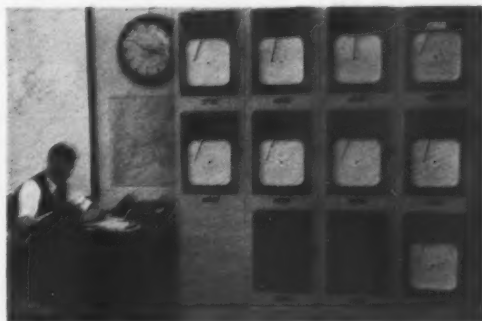
This installation is part of an elaborate system of Metameter Telemetering and remote control, involving distances up to 50 miles, used on this company's far flung network of pipe lines throughout northern and central California. This company is using Metameters that have been in operation since 1935.

From California to New England ... it's Bristol all the way

For over 20 years, the Bristol Metameter Telemeter has been recognized throughout the nation as the finest and most reliable instrument of its kind.

That's why today the Metameter is the most widely used instrument in the telemetering field.

From coast to coast, the Metameter has been serving the needs of oil and gas men everywhere. Find out how the Metameter can solve your measurement, recording or control problem, too. Write today for our free 40-page Bulletin M1710. The Bristol Company, 163 Bristol Road, Waterbury, Conn.



IN SPRINGFIELD, MASS. Dispatching Office of Northeastern Gas Transmission Co., in Springfield, Mass. Pressure readings from six New England points are received by the two Time-Multiplex Receivers shown on the bottom of the panel and individually recorded by the 9 Metameter Receivers. With the new Bristol Multiplexing equipment, up to 15 readings can be transmitted over a single circuit. Thus, tremendous savings are made in circuit costs.

IT'S MADE IN CONNECTICUT

BRISTOL

LOOK FOR OUTSTANDING NEW
DEVELOPMENTS FROM BRISTOL

THE DEPENDABLE GUIDEPOST OF INDUSTRY

AUTOMATIC CONTROLLING, RECORDING AND TELEMETERING INSTRUMENTS

**97
years
of service**

**power
piping**



heating



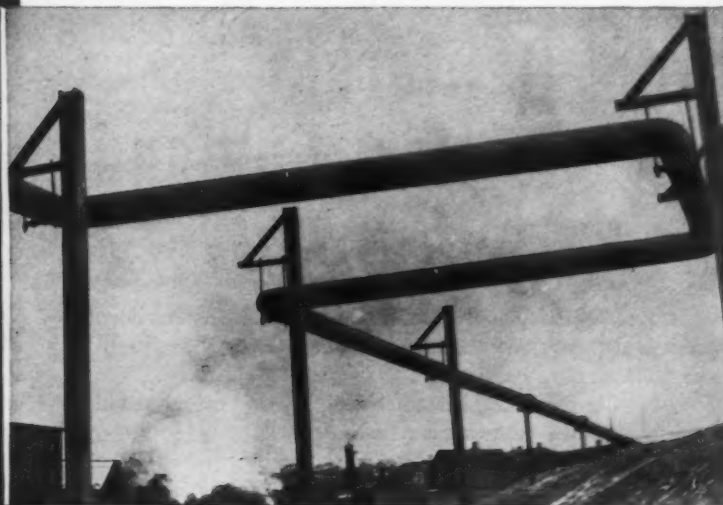
plumbing



sprinklers



It has been our privilege to serve the needs of Connecticut industry for almost a century. If your plant needs power piping, heating, sprinklers or plumbing, our experience can be of significant effect by helping you in both modernizing existing systems or original installation in new construction.



The **POSKETT-BISHOP PIPING Co.**

Piping Contractors Since 1858

NEW HAVEN CONN.



FOREIGN TRADE

By EDWARD M. MAMULSKI
Traffic Manager

Plans for the World Trade Center in New England

PLANS have been organized for the establishment in Boston of a World Trade Center for New England, a non-profit association. The primary purpose will be "to provide a meeting place and service facilities for buyers and sellers of goods moving in international trade." This Center will "seek to bring together in a suitable location, buyers and sellers of manufactured goods and raw materials mov-

ing in world trade, representatives of business, finance, and of public and private agencies and organizations, to stimulate and promote international trade." It will "provide facilities and services useful to business men of New England, from other parts of the country and from abroad, and personnel of foreign embassies, consulates and trade missions."

This organization is planned to be

fully representative of all New England's interest in the export of manufactured goods and the imports of foreign raw materials. To accomplish this objective several types of memberships will be sought in all the New England states. The 100-man board of directors will represent each of the six states. The executive committee will consist of 27 directors of which all six states will be eligible for representation. Each New England Governor, and each member of the New England delegation in Congress will be invited to serve as honorary trustees of the new organization to insure the regional character of the World Trade Center.

Patterned after the highly successful International House and International Trade Mart in New Orleans, it is expected that the World Trade Center in New England, located in Boston, will be in operation the early part of this year.

St. Lawrence Seaway Estimated Tonnage

Various estimates have been given of the probable amount of tonnage which will be transported on the new

Scouting for Incapsulated Coils?



DANO MAKES BOTH !

Dano, makers of a wide variety of coils is fully equipped to meet the increasing demand for these special coils. Keeping pace with modern design, Dano offers incapsulated coils with tough, molded covers that spell extra electrical insulation with freedom from moisture.

Every Dano Coil is custom-made to your specific requirements. Call or write today, and Dano's quote will be on the way!



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OTHER DANO COILS ARE:

Coils for High Temperature Application
Bakelite Bobbin • Cotton Interweave
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Your Elevators Are Production Machines!

When planning new production equipment, by all means include new elevators . . . designed in every way as modern and efficient as the machine tools and materials handling equipment you intend to buy.

Old elevators give out without notice. And even short elevator stoppages can cut deep into the very savings your new machines are expected to make. Only continuous production pays off these days!

59th Year

Manfd. By
THE EASTERN
MACHINERY CO.

EASTERN
Safety
ELEVATORS

Factory:
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PASSENGER • FREIGHT • ELECTRIC • OILDRAULIC®

Installation—Inspection—Repairs—Maintenance

St. Lawrence Seaway. Most widely-quoted estimates are about 50 million tons annually. However, this amount would not be reached during the first few years after completion of the seaway project. At the present time approximately 11 million tons are transported yearly on the existing channel. When the tonnage reaches 50 million tons yearly this would then represent over one-quarter more than the tonnage carried on the Panama Canal.

At the present time heavy laden ocean ships with cargoes of the world enter into the St. Lawrence River and dock at Montreal 1,000 miles from the Atlantic Ocean. The channel is now limited to 3,000-ton vessels. It is expected freighters of 7,000-ton capacity and possibly more will be able to navigate the seaway when construction has been completed.

Following the successful conclusion of discussions between the Governments of Canada and United States on required intergovernmental measures, the way is now clear for action on both sides of the boundary in the construction of deep water facilities from Lake Erie to Montreal. Construction of the United States seaway installations will probably begin in the spring of this year. It is expected that construction will be completed by the end of 1958.

Revised Port Report

"The Ports of Southern New England", a revised report covering six ports is now available. It has been issued as No. 4 of the Port Series and has been jointly prepared and published by the Board of Engineers for Rivers and Harbors of the Army Corps of Engineers and the Maritime Commission. The four Connecticut ports included are Bridgeport, New Haven, New London and Stamford. The other ports are Fall River, Mass., and Providence, R. I.

Chapters include port operation and administration, port facilities and services, port and terminal charges, volume and flow of commerce, and other communication facilities such as steamship lines, railroads and airlines.

This revised report can be obtained for \$2.00 from the Superintendent of Documents, Government Printing Office, Washington, D. C.

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The Renegotiation Act of 1951—Standard Commercial Articles Exemption

By ROBERT A. LaPLANTE

THE Renegotiation Act of 1951 which became effective January 1, 1951 has been extended to receipts or accruals from certain prime contracts and sub-contracts to December 31, 1954.

General modifications and revisions have been incorporated in the law extending the Act.

One of the most important is the exemption concerning "Standard Commercial Articles". For this reason, it is believed that the provisions of this exemption should be brought to the attention of the managements of Connecticut Industry so that the effect of this exemption in renegotiation proceedings may be carefully evaluated.

Prime and subcontracts for such articles are exempt to the extent of the amounts received or accrued thereunder after December 31, 1953, unless the Renegotiation Board makes a specific finding that competitive conditions affecting the sale of any such article "are such as will not reasonably prevent excessive profits".

This new statutory exemption requires the contractors to file certain information pertaining to its sales of articles which it considers to be within the exemption. Within six months after such filing the Board will either (a) make a finding that competitive conditions were sufficient to prevent excessive profits, in which event the exemption will apply, or (b) make a finding that competitive conditions were insufficient, in which event the exemption will not apply. If the Board takes no action with respect to the filing, the exemption will apply.

There are two ways to determine

whether any product you sell is a standard commercial article. Is the article one which is customarily maintained in stock by the manufacturer or by his dealers or distributors? If so, it is a standard commercial article within the meaning of the Act. This refers to stock maintained by the seller, not the purchaser; in this respect this definition differs from the "stock item" exemption described in section 1455.6 (b) of the Board's regulations.

The alternative definition of a standard commercial article is as follows: Is the article one which is manufactured and sold by more than two unrelated companies for general civilian industrial or commercial use, or is it identical "in every material respect" with such an article? To be identical in every material respect, it must be an article "of the same kind, manufactured of the same or substitute materials, and having the same industrial or commercial use or uses, without necessarily being of identical specifications."

The exemption of standard commercial articles applies to contracts and subcontracts for new durable productive equipment as well as to any other contracts or subcontracts.

Additional details concerning this exemption may be obtained from the Renegotiation Board, Washington 25, D. C.

It is important that all contractors evaluate their sales to the government by applying the two definitions cited above so that sales coming within the definitions will be exempted from renegotiation proceedings.

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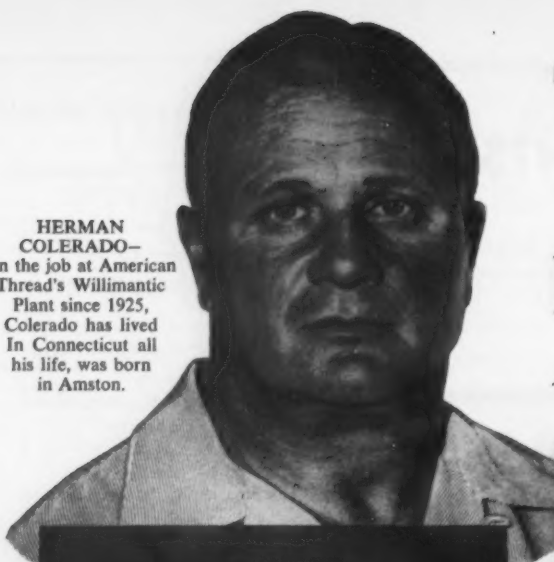
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BUSINESS TIPS

from

School of Business Administration

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Personnel Research

by ROGER STARK, Assistant Professor of Statistics

IN recent years there has been an increase in the quantity and quality of the personnel research conducted by business firms. In view of what is being accomplished it is likely that this type of research will, in time, become commonplace among large and medium-sized firms.

The Nature of Research

There are three steps which can be distinguished in research: observation, the development of a theory based on the observation, and the systematic testing of the theory. Not all research includes all three steps. In fact, general recognition of the importance for the last step is relatively new in the history of human thought. The systematic testing of theories is an essential step in sound research for the following reasons:

1. Most of the theories which arise from observation—even careful observation performed by competent people—prove worthless.
2. Some untested theories are not merely worthless when applied, but actually harmful. This is, for example, true of many of the old theories about the treatment of disease.
3. When a theory is tested and proved invalid the way is opened for the formulation and testing of new theories, thereby accelerating the development of valid knowledge. The acceptance of unfounded theories, which is encouraged by untested research, retards the development of knowledge.
4. Unverified theories generally

lead to controversy. Such controversies waste energy and create divisions which hinder progress. Furthermore, the initial victory in such controversies does not always go to the side which is right.

When the word "research" is used in this discussion it will refer only to research in which theories are systematically tested.

II

Some of the personnel areas in which research has been conducted are selection, performance evaluation, training, and morale and attitude measurement. These are not, however, the only areas to which such research has or can be applied.

Selection

Any known method of selection will reject some applicants who would have proved desirable employees and will accept some who prove undesirable. Any method of selection must, to

be useful, improve the percentage of satisfactory workers hired. In order to do so, it is necessary to determine which scores, responses, or characteristics are associated with applicants who prove successful employees and which with applicants who prove unsuccessful. Very often a personnel manager arbitrarily decides that certain scores, responses or characteristics are favorable or he may be guided by research conducted at some other firm or the recommendations furnished by the publisher of a test or rating scale. In the absence of his own research he has no other choice. Research which has been done on selection indicates, however, that it is dangerous to assume on theoretical grounds that certain scores, responses or characteristics are favorable for a specific job in a specific department. We often find that what seems to work for one firm, or even one branch of a firm may not work in another. For this reason it is desirable that each firm conduct its own research and that management should be wary of the claims made by test salesmen.

Research on selection methods is generally conducted by administering the selection procedure, which may be a test, an application form, an interviewer's report or anything else on which employment decisions can be based, to a group of applicants or employees. The next step—which in the case of applicants may have to be delayed for an extended period—is to rate the individuals in the group with respect to their merit. This is usually the most difficult step in selection research and if it cannot be done successfully the research fails. The next step is to analyze the data to determine whether certain test scores, responses or characteristics occur more fre-

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quently among the desirable or the undesirable employees than they do among the group as a whole. There are different techniques for performing such analysis. The best results are likely to be obtained by a person who thoroughly understands statistical methods. The next step, and a very important one, is to check the results against another group of employees or applicants. This check is necessary because of the danger present in all research that unusual chance variations may lead to incorrect inferences. For example, one may find that a large percentage of the blue-eyed applicants proved unsatisfactory. There are two possible explanations for this observation. One is that blue-eyed applicants are poor risks. The other is that blue-eyed applicants are as good as applicants in general, but that by chance an unusually large percentage of the potentially unsatisfactory employees in the group happened to have blue eyes. The operation of chance factors is another reason why it is desirable that personnel research be conducted with

the assistance of a competent statistician.

Most of the readers of this article are familiar with aptitude and achievement tests, but many may not be familiar with some of the other selection devices developed in recent years. A particularly promising device has been the "scorable application blank." The first step in the development of a "scorable application blank" is to analyze the job to determine the type of biographical data which is likely to be associated with desirable and undesirable employees. A preliminary form is then administered to a group of employees or applicants. The next step is to evaluate individuals in the group with respect to their merit as employees and then determine which responses, if any, distinguish between the desirable and undesirable employees. The items which are retained may then be weighted so that a numerical score can be obtained. The new form should then be administered to a new group as a check on unusual chance variations in the original group.

In addition to research on selection devices, studies have been made of interviewer performance. One line of research has been to study the proportion of unsatisfactory applicants hired by different interviewers to discover which interviewers need additional training or should be transferred to other types of work. Studies have also been made of the unsatisfactory applicants hired by interviewers to discover whether a specific interviewer is inclined to be influenced by characteristics which are irrelevant or even unfavorable.

Research has also been directed toward the development of scorable forms on which interviewers can report their observations. The methods followed are similar to those used for the scorable application blank.

Performance Evaluation

As has been previously stated, research on personnel selection requires an accurate method of evaluating employees with respect to merit. Accurate evaluation of employee perform-



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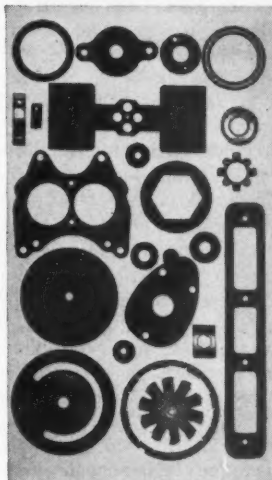
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ance is also desirable for sound wage administration and promotion. It seems only logical that management needs to know who are its superior employees so that it can show them suitable recognition, thereby increasing the likelihood that they will remain with the firm and continue to perform satisfactorily. Management also needs to know who its unsatisfactory employees are, so that it can retrain, transfer or take whatever action is necessary to improve their usefulness to the firm. There is good reason to believe that in many cases there is little relationship between the salary and recognition which a worker receives and his performance. For example, a personnel director made a study of the relationship between salary and output for a clerical job for which output records were kept as a matter of course. Much to his astonishment, he found little relationship. If this could happen in a department where individual output data was available, one may well imagine what must happen when no measure of performance is available.

A common method of evaluating worker performance is by rating scales on which the supervisor is asked to rate employees as below average, average, above average, superior, etc., on a series of traits. When the results achieved by rating scales of this type have been studied, they have often been found unsatisfactory. One thing that is frequently noted is that many supervisors tend to rate all employees toward the top of the scale so that few employees are rated average or below average. Another defect of this type of rating scale becomes apparent when the ratings of a group of men by several supervisors is analyzed. We often find that a disconcertingly large proportion of the variability is attributable to differences between raters. In other words, this type of rating scale is often unduly influenced by the characteristics of the rater.

A different approach to the problem of rating has been to prepare a form consisting of groups of statements, each group consisting of descriptions of behavior. While some of these descriptions may be apparently unfavorable and some favorable, the favorable statements are designed to appear to be about equally favorable, and the same is true for the unfavorable statements. The supervisor, when he fills out such a form for an employee, has the feeling that he is describing how

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the employee acts rather than rating him. It has been found that ratings obtained by this type of report show more variability between the people being rated and less between the raters than the type described previously. The method of developing such forms is similar to the method used for developing scorable application blanks. Forms of this type have also been developed for the purpose of selecting employees for upgrading and promotion to supervisory positions.

A method which has been used successfully for selecting "criterion groups" of desirable and undesirable employees for research purposes has been to find a group of employees whose work is known to several supervisors. Each of these supervisors is asked to rank these men in order of merit; the best man being ranked one, the next best, two; etc. It will usually be found the same men are consistently ranked high by all of the supervisors, some are consistently ranked low, and some are ranked high by some supervisors but low by others. By eliminating the men who are not ranked consistently two groups are obtained, one of which should be markedly superior to the other.

Training

Many firms have training programs but few firms have tried to systematically evaluate the results of their program. Studies of this type are a promising field for personnel research. Some research has been done on the results

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of supervisory courses in human relations which suggests that many such courses accomplish little.

Research has also been conducted to determine which training methods work best in specific situations.

Attitudes and Morale

Much attention has been devoted in recent years to employee attitudes and morale. Some firms have tried to measure morale by means of questionnaires consisting of fairly direct, straightforward questions. There is good reason to believe that such questionnaires have often failed to disclose unfavorable attitudes and morale, and have failed to disclose the factors responsible for unfavorable attitudes, even though the employees usually are not asked to sign their names to the questionnaires.

A more promising approach has been development of forms similar to the ones previously described for the evaluation of employees. The statements from which the employee is asked to select the ones which best and least

describe his own situation are designed to avoid direct expressions of satisfaction or dissatisfaction. The development of these forms requires two "criterion" groups, one consisting of highly satisfied employees and the other of dissatisfied ones. These groups may be selected by means of intensive interviews over a period of time, or on the basis of such objective criteria as length of service, voluntary resignation, etc.

Another line of research has been directed toward discovering whether group morale can be measured by objective criteria; such as, absentee rates, requests for transfer, visits to the plant dispensary, etc.

III

The preceding section has given a brief description of some of the areas in which personnel research has been conducted. Personnel research should not, however, be confused with testing, performance evaluation, training or attitude measurement. Research is a method of investigation, the essence

of which is that a theory should not be accepted until it has been verified objectively.

There are several lessons which can be learned from the personnel research which has already been conducted. One, what is true for one firm or one department of a firm is not necessarily true for another. Two, success may not come easily and quickly. Human behavior is a difficult subject for research because it is difficult to measure human behavior and it is often difficult to control or account for all of the pertinent factors. Most of the successful work which has been accomplished, has been done with the help of professional advice. Some firms have men trained in psychology, statistics and research on their staff. Others have engaged such a man on a consulting basis or have engaged the services of a consulting firm. Special mention should be made of Richardson, Bellows, Henry and Co., a management consulting firm which has a large number of experienced industrial psychologists on its staff and has achieved an excellent reputation.



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SPOTLIGHT ON THE FUTURE*

By CHESTER F. OGDEN
Manager of Purchases
Detroit Edison Company
Detroit, Michigan

General Business Conditions

CAUTIOUS optimism is the keynote of the January survey of the opinion of Purchasing Executives. Production continues high, with 42% reporting an increase and 47% reporting no change from last month. New orders have slackened slightly, with the number reporting increases the lowest since last August. However, the number reporting a decline of new orders is less than last month, and almost half of the committee members report no change.

Commodity prices are firm to slightly higher, with further evidence of increased competition developing in many lines. Some price increases resulted from "off-white" negotiations to secure prompt delivery of needed materials, while others were general increases announced by manufacturers.

There is further indication that the inventory reduction movement has run its course but there is no "rush" to buy. Industries relying on the automobile companies for business and those who use significant quantities of steel are somewhat apprehensive of the Spring labor negotiations. Few steel users, however, have present plans of materially increasing inventories to cover possible strike periods. They feel, however, that general business conditions could be adversely affected if extended work stoppages result from prolonged labor negotiations.

While Purchasing Agents still expect a good 1955, they have become cautious in their buying policy.

Commodity Prices

Reporting Purchasing Agents state that commodity prices give some indication of creeping higher. More of them than at any time since last August

report higher prices. To offset this, competition is keen and often from unexpected sources. The markets generally are firm, with no large movements either up or down.

Inventories

There is further indication that purchased material inventories are reaching a low point. However, there is little inclination to build inventory in anticipation of possible price increases or strikes that may result from labor negotiations later in the year. Careful inventory control continues and any increases result from the requirements of higher production schedules.

Employment

Very little change is reported in the employment situation this month. In the period ahead, Purchasing Agents do not foresee any marked increase over present employment figures. Some, of course, tie employment to production figures in direct ratio. Others are quick to admit that a stiffening of competition would cause

them to search out ways of eliminating indirect and unnecessary labor costs. In some areas, skilled stenographic and clerical help is reported in short supply. Help hired for the Christmas rush seems to have been well absorbed and no significant unemployment is reported anywhere.

Buying Policy

Conservatism continues to be generally observed in developing buying policy. 93% of the reporting Purchasing Agents are operating on a hand-to-mouth to 60 days policy. In almost all cases, commitments are being limited to the minimum lead time required to assure delivery to meet requirement schedules—and often the supplier who has the least time is awarded the contract.

Specific Commodity Changes

A proportionately high number of items were reported up this month. Aluminum and rubber tires led the list, with many and widespread reports of price increases in these items.

On the up side were: Rubber and rubber tires, stainless steel, aluminum, brass mill products, ball bearings, fuel oil, cutting tools, scrap iron, cotton goods, nickel, molybdenum, cement, sulphite paper, mercury, typewriters and business machines, copper, metal office furniture, fatty acids, sodium sulphate.

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* Composite opinion of purchasing agents who comprise the N.A.P.A. Business Survey Committee, whose Chairman is Chester F. Ogden, Manager of Purchases, The Detroit Edison Company, Detroit, Michigan.

BUSINESS PATTERN

A comprehensive summary of the ups and downs of industrial activity in Connecticut for the thirty day period ending on the 15th day of the second previous month.

THE November index of general business activity in Connecticut is estimated at 13% above normal for the second consecutive month. Slight reductions in the employment and construction components offset moderate gains in freight shipments and cotton mill activity with manhours worked remaining unchanged. The United States index of industrial activity increased moderately in November to an estimated 5% above normal, chiefly as a result of substantial gains in metals activity. Improvement in steel has been spurred by rising automobile production and by a revival of inventory purchasing by other steel consuming industries. Preliminary estimates for November indicate further increases in the production of textiles, paper and lumber, and in industrial consumption of electric power.

In November, the index of factory employment in Connecticut continued its gradual decline to 10% above normal. The present standing is thirteen

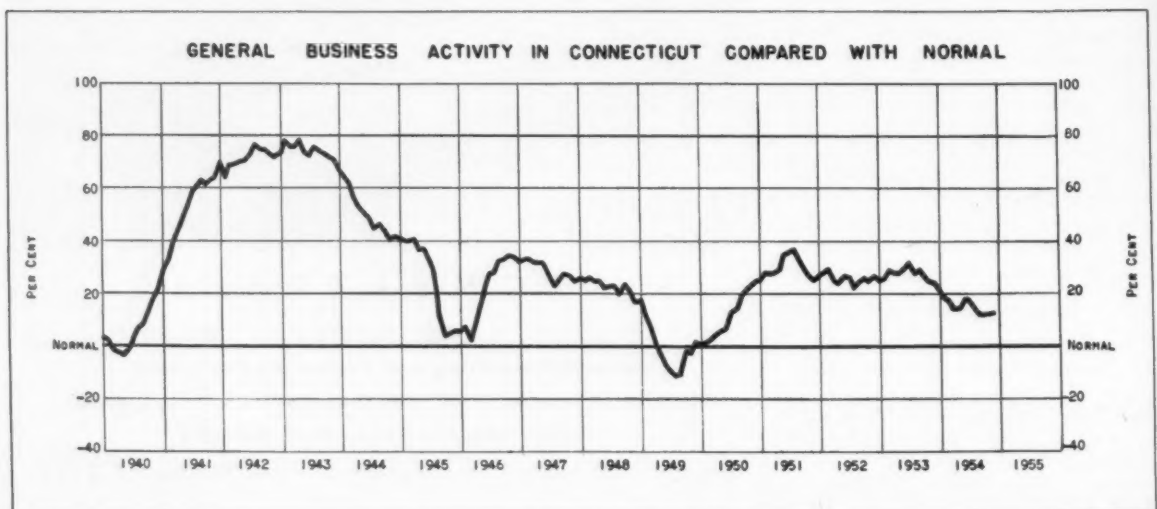
points less than a year ago and eighteen points below June of last year. Manufacturing employment totaled 410,000 in November compared with 453,000 a year earlier. Non-manufacturing employment is now 444,000 against 432,000 in November 1953.

The results of a special survey concerning Connecticut employment has recently been released by the State Department of Labor. Included in the study are many facts about the composition, distribution, age and income of the Labor force in this State. The

following table shows the changes which took place in certain characteristics of employment in Connecticut between March 1953 and March 1954.

The index of manhours worked in Connecticut factories remained unchanged from the preceding month at an estimated 14% above normal. A rise in average weekly hours was offset by a moderate decline in employment. This indicator is currently twenty percentage points below the level that obtained at this time last year. The average work week for Connecticut factory employees in November at 41.0 was the longest so far in 1954. This is slightly higher than the October figure of 40.4 but lower than the 41.9 standing of a year ago. As a result of the longer work week, average weekly earnings increased to \$75.03, also representing the highest level this year. This compares with the \$73.57 figure of a month ago and the \$75.42 of November 1953. Basic hourly earnings edged upward one cent to an all-time high of \$1.77, five cents above the \$1.72 of last year.

	Men		Men	
	March 1953	March 1954	March 1953	March 1954
Force Makeup	65.7%	67.1%	34.3%	32.9%
Medium Age	39.5	39.7	36.6	37.2
Earnings:				
Median	\$76.75	\$72.02	\$44.80	\$44.70
Less than \$40	15.7%	18.9%	40.2%	39.9%
\$40-\$59	12.9%	14.3%	38.6%	40.1%
\$60-\$79	25.8%	27.5%	17.2%	16.2%
\$80-\$99	22.1%	18.3%	2.7%	2.5%
\$100 and over	23.5%	21.0%	1.3%	1.3%



The index of freight shipments originating in eight Connecticut cities for November advanced four percentage points to 23% below normal. Increases of the past three months place the index five percentage points above the 1954 average. However, the level for the past year is some twenty-two points below the 1953 average.

For November the Bureau of Labor Statistics' consumer price index increased fractionally to 114.6 (1947-1949 = 100). The November advance in the consumer index halted a decline which began in August of this year. A rise of 2.1% in the transportation division, reflecting the introduction of 1955 auto models, was responsible for the overall increase of 0.1 point. At the present level the index is 0.7% below the all-time high set in October 1953.

The consumer price index advanced slightly from early 1952 to October of last year when it reached 2% above the January 1952 base. Since,

there has been a minor decrease to approximately +1% at the present time. Major components of the index have varied more widely with housing costs showing a decided increase. Food prices, on the other hand, have reflected an irregular decline to their lowest point in three years.

Career Opportunities Highlighted by Utility Companies

(Continued from page 9)

Richard F. Moore, Moore Special Tool Co., Bridgeport.

"Industrial Accounting", Ernest R. Dayton and Harold J. Lee, The Russell Manufacturing Co., Middletown; "Materials Handling", Victor G. Muzzulin, Jr., Niles-Bement-Pond Co., West Hartford; "Secretarial", Miss Joyce E. Hutchinson, Yaleco Rubber Co., New Haven; "Chemistry and Chemical Engineering", Joseph A. Schmidlein, American Cyanamid Co., Stamford.

With this classroom aid just beginning to receive the attention and discussion of high school students, it is impossible to estimate what impact the project will have—what gains will eventually result to industry.

The sponsors must also give the undertaking a chance to "settle" before deciding whether changes in approach are advisable in future years.

"It appears to be a necessary and effective operation," their statement declares, "and we think the program will benefit the individual student, the guidance departments which are helping our young people make a correct choice of career and, in time, the industrial concerns of Connecticut."

"Sharing a role in such an effort has its direct benefits to us in looking toward serving a healthy Connecticut industry. But, just as important to us is the deep satisfaction in knowing we are being of some help to those to whom Connecticut's economic future is entrusted," the statement concluded.

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(Continued from page 16)

many years, and we sincerely regret that they are not here with us today.

This was not possible because they are exceptionally busy this month introducing to our customers the greatest sales promotion plan ever undertaken in the history of Wiremold—"The Plug PLUGMOLD Campaign". We salute our Sales staff and promise to do our utmost to back them up with prompt shipments on the new business which is confidently expected as a result of their efforts.

This brings us to another section of our Good Will account, which consists of 1200 Wiremold Distributors and thousands of Wiremold Contractors. All of these Distributors and Contractors have confidence in us and readily accept any product which we recommend. If we serve them well, they will cheerfully pay us fair prices and our future will be secure.

And now there is one final section of our Good Will which needs cultivating, and you are in the best possible position to do it.

I refer, of course, to the people at our plant who are not included in this gathering. Many of them are just as well qualified to be here as any of us are—with one exception: they haven't been with us ten years, and this is strictly a seniority affair. It is not these people that I am thinking of—they are just as good Wiremold boosters as we are—but I refer to those who have not been here long enough to get the spirit of our outfit and others who will be joining us from time to time as "freshmen".

If you believe what I am saying, it will be easy for you to do what I am asking you to do and you will take pleasure in doing it.

To be specific, I am asking you to approve a letter which I have written.

If you do approve it, I want you to carry its message personally to all newcomers who do not know the Wiremold story as well as you do.

A new edition of our booklet "When You Work At Wiremold" is in the making.

I have been asked to write a new letter to serve as a foreword.

It reads as follows:

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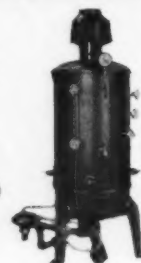


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"To Our Wiremold Friends:

"This little book tells about some of the things you may expect when you work at Wiremold and some of the things that are expected of you.

"Our management is dedicated to the philosophy that if you have a share in our enterprise, you will want to do your full part in making it successful.

"The best rule for a business is the Golden Rule, and together we can make Wiremold a pleasant, profitable place to work in—a place where you will take pride in doing your very best.

"Therefore, we try to treat you as we would like to be treated ourselves. If you are a newcomer and want to find out how this works, ask some of your friends who have been here a long time. Almost half of us have been here ten years or longer.

"It is our ambition to make Wiremold an outstanding example of what Woodrow Wilson meant early in World War I when he said, 'The highest form of efficiency is the spontaneous cooperation of a free people' and what President Eisenhower had in mind when he said, 'It is the American belief in decency and justice and progress, and the value of individual liberty—because of the rights conferred upon each of us by our Creator—that will carry us through. There must be something in the heart as well as in the head.'"

If you agree with me that this is the right way to run our Company—and I think you do or you wouldn't be here—I urge that you help me sell the idea to everybody in our Company and keep it sold.

We want to have in our outfit only those people who are interested in making Wiremold a grand Company for all of us, and, as I have said to you on previous occasions, if perchance someone should drift in here who is not interested in helping us to make this dream come true and if we cannot sell him on the Wiremold idea, then let us politely but firmly invite him to drift out again.

Working together, we can make our Company the best in the country. The future will be as bright as we make it.

But we can't do it alone—so let us thank God for Wiremold and ask His help in operating our Company fairly and honestly.

The Bilco Story

(Continued from page 7)

BILCO began its present growth in 1945, after defense restrictions of critical metals were lifted. The company moved into an abandoned wire mesh mill in nearby New Haven, with a production force of 10, and then proceeded to quickly outgrow the mill's 12,000 square feet of floor space.

The company might have overcome its dilemma by building, but his Connecticut conservatism told Lyons that even the success to which his business was literally galloping didn't warrant taking on this expense. It was better, he decided, to improve the company's financial structure, make certain its base was sound. Even today the Lyons family, after paying themselves a salary, plough the profits back into the burgeoning business.

It wasn't until later—in 1953—that Lyons was able to solve his floor space problem without building a new plant. In nearby West Haven, the Churchward Company, which manufactured "Steelcraft" power boats had ceased operation after a period of receivership. With its 60,000 feet of floor space, numerous unattached buildings and a dock on the West River estuary, it was just what he needed. Lyons took it over.

But right now, space is beginning to become a bit tight, even there. For in addition to the building trade's growing interest in BILCO's basement door, the home handyman seems to be taking to it with increasing enthusiasm. It is right up his alley.

Packaged "knocked down," its components can be assembled in a matter of minutes with a screwdriver. And, counting the time needed to remove a few shingles, attach a piece of flashing, and drill holes for a few lag bolts, the home handyman can install a BILCO basement door, complete with calking, in something under three hours.

Lyons says the "do-it-yourself-er" can cut installation time to a minimum by replacing the lag bolts with threaded studs which can literally be fired into concrete, artificial stone or even structural steel and imbedded so securely that a pull of 3,000 pounds is necessary to dislodge them.

He noted that the Remington Arms Company of Bridgeport makes a tool for this purpose called a stud driver. It is an ultra-safe device which is actuated by a .32 rim fire cartridge that has been adapted to a new use. The gentle crooking of the trigger finger fires a stud of special metal alloy with sufficient force to penetrate three-quarter inch structural steel. The tool may be rented, says Lyons, as one rents a sander, for instance, from a lumber yard or hardware store.

BILCO's sheet steel basement hatchway is a natural for the home handy-

(Continued on page 68)

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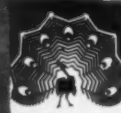
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IT'S MADE IN CONNECTICUT

EDITOR'S NOTE: This department, giving a partial list of peace-time products manufactured in Connecticut by company, seeks to facilitate contacts between prospective purchasers in domestic or foreign markets and producers. It includes only those listings purchased by Connecticut manufacturers. Interested buyers may secure further information by writing this department. Connecticut manufacturers desiring to list their products in this department should write the Editor for listing rates.

(Advertisement)

Accounting Forms		Aluminum—Sheets & Coils		Batteries	
Baker-Goodyear Co The	New Haven	United Smelting & Aluminum Co Inc	New Haven	Bond Electric Corporation Division of Olin Industries Inc (flashlight, radio, hearing aid and others)	New Britain
Accounting Machines		Ammunition		Winchester Repeating Arms Co Division of Olin Industries Inc (flashlight, hearing aid and others)	New Haven
Underwood Corporation	Bridgeport	Remington Arms Co Inc and Peters Cartridge Div	Bridgeport	Bearings	
Adding Machines		Winchester Repeating Arms Company	New Haven	Fafnir Bearing Co (ball)	New Britain
Underwood Corporation	Bridgeport	Olin Industries Inc	New Haven	Marlin-Rockwell Corporation	Plainville
Advertising Mats		Anodizing		New Departure Div of General Motors (ball roller)	Bristol
Lockwood Sons Inc Wm H	Hartford	Conn Metal Finishing Co	Hamden	Norma-Hoffmann Bearings Corp (ball and roller)	Stamford
Advertising Plates		Anodizing Equipment		Bellows	
Lockwood Sons Inc Wm H	Hartford	Conn Metalcraft Inc	New Haven	Bridgeport Thermostat Company Inc (metallic)	Bridgeport
Advertising Specialties		Artificial Leather		Bellows Assemblies	
H C Cook Co The 32 Beaver St	Ansonia	Permatex Fabrics Corp The	Jewett City	Bridgeport Thermostat Company Inc	Bridgeport
Halco Co	New Haven	Asbestos		Bellows Shaft Seal Assemblies	
Air Compressors		Auburn Manufacturing Company The (gaskets, packings, wicks)	Middletown	Bridgeport Thermostat Company Inc	Bridgeport
Spencer Turbine Co The	Hartford	Asbestos & Rubber Packing		Bells	
Air Conditioning		Colt's Manufacturing Company	Hartford	Bevin Brothers Mfg Co.	East Hampton
Norwalk Airconditioning Corp The (forced air heating units oil fired)	South Norwalk	Asarcon Bronze		Gong Bell Co The	East Hampton
Air Impellers		Knapp Foundry Company Inc (bushing & bearing stock)	Guilford	N N Hill Brass Co The	East Hampton
The Torrington Manufacturing Co	Torrington	Assemblies—Small		Belt Fasteners	
Aircraft		Barnes Co The Wallace Div Associated Spring Corp	Bristol	Saling Manufacturing Company (patented self-aligning)	Unionville
Sikorsky Aircraft Division United Aircraft Corporation (helicopters)	Bridgeport	Greist Manufacturing Co The	New Haven	Belting	
Aircraft Accessories		Humason Mfg Co The	Forestville	Hartford Belting Co	Hartford
Chandler Evans Div Niles-Bement-Pond Co (Piston and Jet Engine Accessories—Carburetors, Fuel Controls, Afterburner Regulators, Pumps, Servomechanisms and Protek Plugs)	West Hartford	J H Sessions & Son	Bristol	Russell Mfg Co The	Middletown
Gabb Special Products Div E Horton & Son Company (filler caps—pressure fuel servicing systems)	Windsor Locks	Auto Cable Housing		Thames Belting Co The	Norwich
Hamilton Standard Div United Aircraft Corp (propellers and other aircraft equipment)	Windsor Locks	Wiremold Company The	Hartford	Bends—Pipe or Tube	
Manning Maxwell & Moore Inc (aircraft pressure switches and jet engine afterburner control systems)	Stratford	Automatic Control Instruments		National Pipe Bending Co The	160 River St New Haven
Russell Manufacturing Company The (CAA approved safety belts; webbing and hardware for safety belts; shock rings and shock cord; ring and cord hardware; webbing for all aircraft applications)	Middletown	Bristol Co The (temperature, pressure, flow, humidity, time)	Waterbury	Bicycle Coaster Brakes	
Aircraft Instruments		Automobile Accessories		New Departure Div General Motors Corp	Bristol
Gorn Electric Company Inc	Stamford	Kilbourn-Sauer Company (lights and other accessories)	Fairfield	Bicycle Sundries	
Aircraft—Repair & Overhaul		Automotive Bodies		New Departure Div General Motors Corp	Bristol
Airport Department Pratt & Whitney Aircraft Division	Rentschler Field East Hartford	Metropolitan Body Company	Bridgeport	Binders Board	
Aircraft Test Equipment		Automotive Parts		Colonial Board Company	Manchester
United Manufacturing Co Division of The W I Maxson Corp	Hamden	Eis Manufacturing Co (Hydraulic and Mechanical)	Middletown	Biological Products	
Air Ducts		Raybestos Division of Raybestos-Manhattan Inc (Brake Lining, Lined Brake Shoes, Clutch Facings, Automatic Transmission Parts, Fan Belts, Radiator Hose and Miscellaneous Rubber)	Bridgeport	Ernst Bischoff Company Inc	Ivoryton
Wiremold Co The (Retractable)	Hartford	Automotive & Service Station Equipment		Blackening Salts for Metals	
Air Heaters—Direct Fired		Scovill Manufacturing Company (Canned Oil Dispensers)	Waterbury 91	Enthone Inc	New Haven
Peabody Engineering Corporation	Stamford	Automotive Tools		Mitchell-Bradford Chemical Co	Bridgeport
Aluminum Bronze Castings		Eis Manufacturing Company	Middletown	Black Oxide Treatment	
Knapp Foundry Company Inc	Guilford	Bags—Paper		Bennett Metal Treating Co The	Elmwood
Aluminum Castings		American Paper Goods Company The	Kensington	1045 New Britain Ave	Elmwood
Consolidated Industries Inc	West Cheshire	Bakelite Moldings		Blades	
Eastern Malleable Iron Company The	Naugatuck	Watertown Mfg Co The	Watertown	Capewell Manufacturing Company	Metal Saw
Newton-New Haven Co 688 Third Avenue	West Haven	Balls		Division (hack saw and band saw)	Hartford
Charles Parker Company The	Meriden	Abbott Ball Co The (steel bearing and burnishing)	Hartford	Blankets—Automatic	
Stamford Casting Company Inc (Aluminum, Magnesium and Bronze)	Stamford	Hartford Steel Ball Co The (steel bearing and burnishing, brass, bronze, monel, stainless aluminum)	Hartford	General Electric Company	Bridgeport
Aluminum Forgings		Kilian Steel Ball Corp The	Hartford	Blocks	
Consolidated Industries Inc	West Cheshire	Banbury Mixers		Howard Company (cupola fire clay)	New Haven
Scovill Manufacturing Company	Waterbury 91	Farrel-Birmingham Company Inc	Ansonia	Blower Fans	
Aluminum Ingots		Barrels		Colonial Blower Company	Plainville
Lapides Metals Corp	New Haven	Abbott Ball Co The (burnishing and tumbling)	Hartford	Spencer Turbine Co The	Hartford
Aluminum Lasts		Hartford-Steel Ball Co The (tumbling)	Hartford	Blower Systems	
United States Rubber Company Shoe Hardware Division	Waterbury	Conn Metalcraft Inc	New Haven	Colonial Blower Company	Plainville
Aluminum Paint		Barrels—Tumbling		Ripley Co	Middletown
Baer Brothers	Stamford	Rolock Inc	Fairfield	Blueprints and Photostats	
Aluminum Paste		Baskets—Wire		Joseph Merritt & Co	Hartford
Baer Brothers	Stamford	Bathroom Accessories		Bigelow Co The	New Haven
		Autoyre Company The	Oakville	Bolts and Nuts	
		Charles Parker Co The	Meriden	Blake & Johnson Co The (nuts machine screw-bolts, stove)	Waterville
				Clark Brothers Bolt Co	Middleville
				Bonderizing	
				Claireglow Mfg Company	Portland (Advt.)

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Box Board		Bridgeport Brass Co	Bridgeport	Cams	
Lydall & Foulds Paper Co The	Manchester	Chase Brass & Copper Co	Waterbury	American Cam Company Inc	Hartford
National Folding Box Co Inc	New Haven	Plume & Atwood Mfg Co The	Thomaston	Hartford Special Machinery Co The	Hartford
Robertson Paper Box Co	Montville	Scovill Manufacturing Company	Waterbury 91	Rowbottom Machine Company Inc	Waterbury
Gair Company Inc Robert	Montville	Western Brass Mills Division of	Olin Industries Inc	Canvas Products	
New Haven Board and Carton Co The	New Haven	Brick-Building		F B Skiff Inc	Hartford
Boxes		Donnelly Brick Co The	New Britain	Capacitors	
Clairglow Mfg Company (metal)	Portland	Bricks—Fire		Electro Motive Mfg Co Inc The (mica & trimmer)	Willimantic
Connecticut Container Corporation	New Haven	Howard Company	New Haven	Card Clothing	
Gair Company Inc Robert (corrugated and solid fibre shipping containers)	Portland	Mullite Refractories Co The	Shelton	Standard Card Clothing Co The (for textile mills)	Stafford Springs
Merriam Mfg Co (steel cash, bond, security, fitted tool and tackle boxes)	Durham	Bright Wire Goods		Carpenter's Tools	
Warner Bros Co The (Acetate, Paper, Acetate and Paper Combinations, Counter Display, Setup)	Bridgeport	Sargent & Company (Screw Eyes, Screw Hooks, Cup Hooks, Hooks and Eyes, C H Hooks)	New Haven	Sargent & Company (Planes, Squares, Plumb Bobs, Bench Screws, Clamps and Saw Vices)	New Haven
Boxes and Crates		Broaching		Carpet	
City Lumber Co of Bridgeport Inc The	The Bridgeport	Hartford Special Machinery Co The	Hartford	B F Goodrich Sponge Products Division	Shelton
Wallingford Planing Mill Co Inc	Yalesville	Bronze & Aluminum Castings		Carpet Cushion	
Boxes—Metal		Charles Parker Co	Meriden	B F Goodrich Sponge Products Division	Shelton
Merriam Mfg Co (Bond and Security, Cash and Utility, Personal Files and Drawer Safes)	Durham	Knapp Foundry Company Inc (rough or machined)	Guilford	Carpets and Rugs	
Boxes—Paper—Folding		Bronze Powders		Bigelow-Sanford Carpet Co	Thompsonville
Atlantic Carton Corp	Norwich	Baer Brothers	Stamford	Casters	
Bridgeport Paper Box Co	Bridgeport	Brooms—Brushes		Bassick Company The (Industrial and General)	Bridgeport
Carpenter-Hayes Paper Box Co Inc The	East Hampton	Fuller Brush Co The	Hartford	Casters—Industrial	
Curtis & Sons Inc S	Sandy Hook	Buckles		George P Clark Co	Windsor Locks
Dowd Carton Co M S	Groton	B Schwanda & Sons	Staffordville	Castings	
Folding Cartons Incorporated (paper, folding)	Versailles	G E Prentice Mfg Co The	Kensington	Connecticut Foundry Co (grey iron)	Rocky Hill
Gair Company Inc Robert	Montville	Hawie Mfg Co The	Bridgeport	Connecticut Malleable Castings Co (malleable iron castings)	New Haven
H J Mills Inc	Bristol	John M Russell Mfg Co Inc.	Naugatuck	Consolidated Industries Inc	West Cheshire
National Folding Box Co Inc (paper folding)	New Haven	North & Judd Manufacturing Co	New Britain	Charles Parker Company The (brass, bronze, aluminum)	Meriden
New Haven Board and Carton Co The	New Haven	Patent Button Co The	Waterbury	Eastern Malleable Iron Company The (malleable iron, metal and alloy)	Naugatuck
Robertson Paper Box Co	Montville	United States Rubber Company Shoe Hardware Division	Waterbury	Farrel-Birmingham Company Inc (Meehanite, Nodular, Iron, Steel)	Ansonia
Warner Bros Co The	Bridgeport	Buffing & Polishing Compositions		Gillette-Vibber The (grey iron, brass, bronze, aluminum, also Bronze Bushing Stocks)	New London
Boxes—Paper—Setup		Apothecaries Hall Co	Waterbury	Plainville Casting Company (gray, alloy and high tensile irons)	Plainville
Box Shop Inc The	New Haven	Lea Mfg Co	Waterbury	Malleable Iron Fittings Co (malleable iron and steel)	Plainville
Bridgeport Paper Box Co	Bridgeport	Buffing Wheels		McLagon Foundry Co (grey iron)	Naugatuck
Heminway Corporation The	Waterbury	Williamsville Buff Div The	Bullard Clark Danielson	Meyer Iron and Brass Foundry Inc (grey iron)	Shelton
H J Mills Inc	Bristol	Burners		Newton-New Haven Co (zinc and aluminum)	688 Third Ave West Haven
Strouse Adler Company The	New Haven	Plume & Atwood Mfg Co The (kerosene oil lighting)	Waterbury	Philbrick-Booth & Spencer Inc (grey iron)	Hartford
Warner Bros Co The	Bridgeport	Burners—Automatic		Producto Machine Company The	Bridgeport
Brake Cables		Peabody Engineering Corporation	Stamford	Scovill Manufacturing Company (Brass & Bronze)	Waterbury 91
Eis Manufacturing Co	Middletown	Burners—Coal and Oil		Stamford Casting Company Inc (Aluminum, Magnesium and Bronze)	Stamford
Brake Linings		Peabody Engineering Corporation (Combined)	Stamford	Turner & Seymour Mfg Co The (gray iron, semi steel and alloy)	Torrington
Raybestos Division of Raybestos-Manhattan Inc (Automotive and Industrial)	Bridgeport	Burners—Gas		Union Mfg Co (grey iron & semi steel)	New Britain
Russell Mfg Co The	Middletown	Peabody Engineering Corporation (Blast Furnace)	Stamford	Waterbury Foundry Company The (highway & sash weights)	Waterbury
Brake Service Parts		Burners—Gas and Oil		Wilcox Crittenden & Co Inc (gray iron and brass)	Middletown
Eis Manufacturing Co	Middletown	Peabody Engineering Corporation (Combined)	Stamford	Castings—Investment	
Brass & Bronze		Burners—Refinery		Arwood Precision Casting Corp	Groton
American Brass Co The (sheet, wire, rods, tubes)	Waterbury	Peabody Engineering Corporation (For Gas and Oil)	Stamford	Cements—Refractory	
Bridgeport Brass Company (sheet, rod, wire and tubing)	Bridgeport	Burnishing		Mullite Refractory Co The	Shelton
Bristol Brass Corp The (sheet, wire, rods)	Bristol	Abbott Ball Co The (Burnishing Barrells and Burnishing Media)	Hartford	Chain	
Chase Brass & Copper Co	Waterbury	Burs		John M. Russell Mfg Co Inc	Naugatuck
Miller Company The (phosphor bronze and brass in sheets, strips, rolls)	Meriden	Pratt & Whitney Div Niles-Bement-Pond Co	West Hartford	Turner and Seymour Mfg Co The (weldless, sash, jack, safety, furnace, universal, lion and cable)	Torrington
Plume & Atwood Mfg Co The (sheet, wire, rod)	Thomaston	Busways		Chain—Power Transmission and Conveying	
Scovill Manufacturing Company	Waterbury 91	Distribution Assemblies Department, General Electric Co	Plainville	Whitney Chain Company	Hartford
Tinsheet Metals Co The (sheets and rolls)	Waterbury	Buttons		Chain—Welded and Weldless	
Western Brass Mills Division of Olin Industries Inc (sheet, strip)	New Haven	B Schwanda & Sons	Staffordville	Round Chain Div. Republic Steel Corp.	Bridgeport
Brass & Bronze Ingot Metal		Frank Parizek Manufacturing Co The	Putnam	Chain—Bead	
Plume & Atwood Mfg Co The	Thomaston	Patent Button Co The	Waterbury	Auto-Swage Products Inc	Shelton
Whipple and Choate Company The	Bridgeport	Scovill Manufacturing Company (Uniform and Tack Fasteners)	Waterbury 91	Bead Chain Mfg Co The	Bridgeport
Brass, Bronze, Aluminum Castings		Waterbury Companies Inc (Uniform and Fancy Dress)	Waterbury	Chairs	
Charles Parker Company The	Meriden	Cabinets		The Hitchcock Chair Company	Riverton (Advt.)
Stamford Casting Company Inc	Stamford	Charles Parker Co The (medicine)	Meriden		
Victoria Brass Foundry Inc	Guilford	Cabinet Work			
Brass Goods		Hartford Builders Finish Co	Hartford		
American Brass Company The	Waterbury	Cable—Asbestos Insulated			
Plume & Atwood Mfg Co The (to order)	Waterbury	Rockbestos Products Corp	New Haven		
Brass Goods		Cable—BX Armored			
Roatand Mfg Co The (Ecclesiastical Brass Wares)	Milford	General Electric Company	Bridgeport		
Scovill Manufacturing Company (to order)	Waterbury 91	Cable—Nonmetallic Sheathed			
Western Brass Mills Division of Olin Industries Inc	New Haven	General Electric Company	Bridgeport		
		Cable—Service Entrance			
		General Electric Company	Bridgeport		

IT'S MADE IN CONNECTICUT

Chemical Manufacturing		Concrete Products		Cotton Yarn	
Carwin Company The	North Haven	Plasticrete Corp	Hamden	Floyd Cranska Co The	Moosup
Chemicals		Cones		Counting Devices	
American Cyanamid Company	Waterbury	Sonoco Products Co (Climax-Lowell Div)	Mystic	Veeder-Root Inc	Hartford
Apothecaries Hall Co	Waterbury	Consulting Engineers		Couplings—Self-Sealing	
Carwin Company The	North Haven	Stanley P Rockwell Co Inc The (Consulting)	Hartford	Sperry Products Inc	Danbury
Macalaster Bicknell Company	New Haven	296 Homestead Ave		Cranes and Conveyors	
MacDermid Incorporated	Waterbury	Continuous Mill Gages		I-B Engineering Sales Co	New Haven
Naugatuck Chemical Division	United States	Pratt & Whitney Div Niles-Bement-Pond Co	West Hartford	Crushers	
Rubber Co	Naugatuck	Contract Machining		Farrel-Birmingham Company Inc (Stone and Ore)	(Stone and Ansonia)
New England Lime Company	Canaan	Malleable Iron Fittings Company	Brantford	Cups—Paper	
Pfizer & Co Inc Chas	Groton	Charles Parker Co	Meriden	American Paper Goods Company The ("Purititan")	Kensington
Chemicals—Agriculture		Contract Manufacturers		Cushioning for Packaging	
Naugatuck Chemical Division	United States	Greist Mfg Co The (metal parts and assemblies)	New Haven	B F Goodrich Sponge Products Division	Shelton
Rubber Co (insecticides, fungicides, weed killers)	Naugatuck	503 Blake St		Gilman Brothers Co The	Gilman
Christmas Light Clips		Merriam Mfg Co (production runs—metal boxes and containers to specifications)	Durham	Cut Stone	
Foursome Manufacturing Co	Bristol	Charles Parker Co (sheet metal fabricators)	Meriden	Dextone Co The	New Haven
Chromium Plating		Plume & Atwood Mfg Co The (metal parts & assemblies)	Waterbury	Cutters	
Chromium Corp of America	Waterbury	Scovill Manufacturing Company (metal parts and assemblies)	Waterbury 91	Barnes Tool Company The (pipe cutters, hand)	New Haven
Chromium Process Company The	Shelton	J H Sessions & Son	Bristol	Mitrametric Co The (ground pinion)	Torrington
City Plating Works Inc	Bridgeport	Controllers		Pratt & Whitney Div Niles-Bement-Pond Co (Milling Cutters all types)	West Hartford
Chucks		Bristol Company The	Waterbury	Decorative Plating and Polishing	
Cushman Chuck Co The	Hartford	Manning Maxwell & Moore Inc	Stratford	City Plating Works Inc	Bridgeport
Horton Chuck Div The E Horton & Son Company	Windsor Locks	Controls—Remote		Deep Drawings	
Jacobs Manufacturing Co The	West Hartford	Panish Controls (Remote Controls for Marine & Aeronautic Applications)	Bridgeport	Stanley Pressed Metal	New Britain
Union Manufacturing Company	New Britain	Conveyor Systems		Delayed Action Mechanism	
Chucks—Drill		Leeds Electric & Mfg Co The	East Haven	M H Rhodes Inc	Hartford
Jacobs Manufacturing Co The	West Hartford	Production Equipment Co	Meriden	R W Cramer Company Inc The	Centerbrook
Chucks & Face Plate Jaws		Copper		Demineralizers	
Cushman Chuck Co The	Hartford	American Brass Corp The (sheet, wire, rods, tubes)	Waterbury	Crystal Research Laboratories	Hartford
Union Mfg Co	New Britain	Bridgeport Brass Company (sheet, rod, wire and tubing)	Bridgeport	Diamonds—Industrial	
Horton Chuck Div The E Horton & Son Company	Windsor Locks	Bristol Brass Corp The (steel)	Bristol	Diamond Tool and Die Works	Hartford
Chucks—Power Operated		Chase Brass & Copper Co (sheet, rod, wire tube)	Waterbury	Dictating Machines	
Cushman Chuck Co The	Hartford	Thinsheet Metals Co The (sheets and rolls)	Waterbury	Dictaphone Corporation	Bridgeport
Union Manufacturing Company	New Britain	Western Brass Mills Division of Olin Industries Inc (sheet, strip)	New Haven	Gray Manufacturing Company The	Hartford
Circuit Breakers		Copper Castings		Soundscribe Corporation The	New Haven
Trumbull Components Department, General Electric Co	Plainville	Knapp Foundry Company Inc	Guilford	Die Castings	
Clay		Copper Sheets		Newton-New Haven Co Inc	New Haven
Howard Company (Fire Howard "B" and High Temperature Dry)	New Haven	American Brass Company The	Waterbury	Die Casting Dies	
Cleaning Compounds		New Haven Copper Co The	Seymour	ABA Tool & Die Co	Manchester
Enthone Inc (Industrial)	New Haven	Copper Shingles		Parker Stamp Works Co The	Hartford
Cleansing Compounds		New Haven Copper Co The	Seymour	Weimann Bros Mfg Co The	Derby
MacDermid Incorporated	Waterbury	Copper Water Tube		Eastern Machine Screw Corp The	Truman & New Haven
Clock Mechanisms		American Brass Company The	Waterbury	Die Heads—Self Opening	
Lux Clock Mfg Co The	Waterbury	Bridgeport Brass Co	Bridgeport	Eastern Machine Screw Corp The	New Haven
Clocks		Cords—Asbestos		Die Polishing Machinery	
E Ingraham Co The	Bristol	General Electric Company	Bridgeport	Hartford Special Machinery Co The	Hartford
Seth Thomas Clocks	Thomaston	Cords—Braided		Die Sets	
United States Time Corporation The	Waterbury	General Electric Company	Bridgeport	Pratt & Whitney Div Niles-Bement-Pond Co (Precision)	West Hartford
Clocks—Alarm		Cords—Heater		Product Machine Company The	Bridgeport
Lux Clock Mfg Co The	Waterbury	General Electric Company	Bridgeport	Union Mfg Co (precision, steel and semi-steel)	New Britain
Clocks—Automatic Cooking		Cords—Portable		Dies	
Lux Clock Mfg Co The	Waterbury	General Electric Company	Bridgeport	Hoggson & Pettis Mfg Co The 141 Brewery St	New Haven
Clutches		Cord Sets		Mitrametric Co The (ground for gears)	Torrington
Snow-Nabstedt Gear Corp The	New Haven	Seeger-Williams Inc	Bridgeport	Parker Stamp Works Inc The (plastics and die castings)	Hartford
Clutch Facings		Cord Sets—Electric		Pratt & Whitney Div Niles-Bement-Pond Co (Monocone and Ducone Dies)	West Hartford
Raybestos Division of Raybestos-Manhattan Inc (Molded, Woven, Semi-metallic and Full-metallic)	Bridgeport	General Electric Company	Bridgeport	Die Sinkers	
Russell Mfg Co The	Middletown	Cork Cots		Pratt & Whitney Div Niles-Bement-Pond Co	West Hartford
Coils		Sonoco Products Co (Climax-Lowell Div)	Mystic	Dies and Die Sinking	
Dano Electric Company	Winsted	Corrugated Box Manufacturers		Consolidated Industries	West Cheshire
Bittermann Electric Company	Canaan	Connecticut Container Corporation	New Haven	Dish Drying Machines	
Coils—Pipe or Tube		Corrugated Containers Inc	Hartford	Colt's Manufacturing Company	Hartford
National Pipe Bending Co The	160 River St New Haven	Corrugated Shipping Cases		Dish Washing Machines	
Whitlock Manufacturing Co The	Hartford	Connecticut Container Corporation	New Haven	Colt's Manufacturing Company	Hartford
Commercial Heat Treating		Connecticut Corrugated Box Div Robert Gair Co Inc	Portland	Displays—Metal	
A F Holden Company The	52 Richard St West Haven	D L & D Container Corp 87 Shelton Ave	New Haven	Merriam Mfg Co (Contract Work to Individual Specifications)	Durham
Commercial Truck Bodies		Cosmetic Containers		Distribution Centers	
Metropolitan Body Company	Bridgeport	Evelet Specialty Co The	Waterbury	Distribution Assemblies Department, General Electric Co	Plainville (Advt.)
Comparators		Plume & Atwood Mfg Co The (metal)	Waterbury		
Pratt & Whitney Div Niles-Bement-Pond Co (Electro-limit and Air-O-Limit)	West Hartford	Cosmetics			
Compressors		J B Williams Co The	Glastonbury		
Norwalk Company Inc (high pressure air and gas)	South Norwalk	Cotton and Asbestos Wicking			
		Bland Burner Co The	Hartford		

I T ' S M A D E I N C O N N E C T I C U T

Door Closers		Electric Timers		Envelopes—Stock and Special	
Sargent & Company	New Haven	Sessions Clock Co The	Forestville	American Paper Goods Company The	Kensington
Yale & Towne Mfg Co The	Stamford	Electric Timing Motors		Extractors—Tap	
Dowel Pins		Sessions Clock Co The (small)	Forestville	Walton Company The	West Hartford
Allen Manufacturing Co The	Hartford	Electric Wire		Eyelets	
Holo-Krome Screw Corp The	West Hartford	General Electric Company	Bridgeport	American Brass Company The	Waterbury
Drafting Accessories		Rockbestos Products Corp (asbestos insulated)	New Haven	Platt Bros & Co The P O Box 1030	Waterbury
Joseph Merritt & Co	Hartford	Electric Wiring Devices		Plume & Atwood Mfg Co The	Waterbury
Drilling Machines		Arrow-Hart & Hegeman Electric Co The	Hartford	Scovill Manufacturing Company	Waterbury 91
Pratt & Whitney Div Niles-Bement-Pond Co (Deep Hole)	West Hartford	General Electric Company	Bridgeport	Eylets, Ferrules and Wiring Terminals	
Drilling and Tapping Machinery		Electrical Circuit Breakers		American Brass Company The	Waterbury
Hartford Special Machinery Co The	Hartford	Federal Electric Products Co Inc	Hartford	Eylet Machine Products	
Drop Forgings		Electrical Conduit Fittings & Grounding Specialties		American Brass Company The	Waterbury
Atwater Mfg Co	Plantsville	Gillette-Vibber Company The	New London	Ball & Socket Mfg Co The	West Cheshire
Blakeslee Forging Company The	Plantsville	Electrical Control Apparatus		Plume & Atwood Mfg Co	Waterbury
Capewell Mfg Company	Hartford	Federal Electric Products Co Inc	Hartford	Fancy Dress Buttons and Buckles	
Consolidated Industries	West Cheshire	Plainville Electrical Products Co The	Plainville	Waterbury Companies Inc	Waterbury
Wilcox Crittenden & Co Inc	Middletown	Electrical Goods		Fans—Electric	
Druggists' Rubber Sundries		A C Gilbert Co	New Haven	General Electric Company	Bridgeport
Seamless Rubber Company The	New Haven	Electrical Motors		Fasteners—Slide & Snap	
Duplicating Machines—Automatic		U S Electrical Motors Inc	Milford	G E Prentice Mfg Co The	Kensington
Pratt & Whitney Div Niles-Bement-Pond Co	West Hartford	Electrical Outlet and Switch Boxes, and Covers		Scovill Manufacturing Company (snap and slide fasteners)	Waterbury 91
Electric Cables		General Electric Company	Bridgeport	Felt	
Rockbestos Products Corp (asbestos insulated)	New Haven	Electrical Recorders		Auburn Manufacturing Company The (mechanical, cut parts)	Middletown
Electric Clocks		Bristol Co The	Waterbury	Drycor Felt Company (paper makers and industrial)	Staffordville
Sessions Clock Co The (alarm, kitchen, occasional and office)	Forestville	Electrical Relays and Controls		Felt—All Purpose	
Electric—Commutators & Segments		Allied Control Co	Plantsville	American Felt Co (Mill & Cutting Plant)	Glenville
Cameron Elec Mfg Co The (rewinding motors)	Ansonia	Electrical Switchboards		Chas W House & Sons Inc (Mills & Cutting Plant)	Unionville
Electric Cord Springs		Plainville Electrical Products Co The	Plainville	Fenders—Boat	
Bristol Spring Manufacturing Co	Plainville	Electrical Wiring Systems		B F Goodrich Sponge Products Division	Shelton
Electric Cords		Wiremold Co The	Hartford	Fibre Board	
General Electric Company	Bridgeport	Electronics		Case Brothers Inc	Manchester
Rockbestos Products Corp (asbestos insulated)	New Haven	Gray Manufacturing Company The	Hartford	C H Norton Co The	North Westchester
Electric Eye Control		Ripley Co	Middletown	Stevens Paper Mills Inc The	Windsor
Ripley Company Inc	Middletown	Sturupp Larrabee & Warmers Inc	Middletown	Finger Nail Clippers	
Electric Fixture Wire		Electroplating		H C Cook Co The	32 Beaver St Ansonia
General Electric Company	Bridgeport	National Sherardizing & Machine Co	Hartford	File Cards	
Rockbestos Products Corp (asbestos insulated)	New Haven	Waterbury Plating Company	Waterbury	Standard Card Clothing Co The	Stafford Springs
Electric Hand Irons		Electroplating—Equipment & Supplies		Films	
Winsted Hardware Mfg Co (trade mark "Durability")	Winsted	Enthone Inc	New Haven	Cine-Video Productions Inc	Milford
Electric Heating Elements		Lea Manufacturing Co The	Waterbury	Firearms	
Hartford Element Co	Hartford	MacDermid Incorporated	Waterbury	Colt's Manufacturing Company	Hartford
Electric Insulation		Electroplating Processes & Supplies		Marlin Firearms Co The	New Haven
Case Brothers Inc	Manchester	Enthone Inc	New Haven	O F Mosberg & Sons Inc	New Haven
Stevens Paper Mills Inc The	Windsor	United Chromium Incorporated	Waterbury	Remington Arms Company Inc	Bridgeport
Electric Lighting Fixtures		Electrotypes		Winchester Repeating Arms Company Division	New Haven
Fan-Craft Mfg Co (residential, church, post lanterns)	Plainville	Barnum-Hayward Electrotypes Co Inc	New Haven	Olin Industries Inc	New Haven
Plume & Atwood Mfg Co The	Waterbury	Lockwood Sons Inc Wm H	Hartford	Fire Hose	
Wasley Products Inc	Plainville	New Haven Electrotypes Div	Electrographic New Haven	Fabrics Fire Hose (municipal and industrial)	Sandy Hook
Electric Motor Controls		Elevators		Fireplace Goods	
Arrow-Hart & Hegeman Electric Co The	Hartford	Eastern Machinery Co The (passenger and freight)	New Haven	American Windshield & Specialty Co The	Milford
Electrical Outlet and Switch Boxes, and Covers		General Elevator Service Co	Hartford	881 Boston Post Road	Chapel
General Electric Company	Bridgeport	Enameling		John P Smith Co The (screens)	423-33 New Haven
Electric Panel Boards		Conn Metal Finishing Co	Hamden	Fireproof Floor Joists	
Federal Electric Products Co Inc	Hartford	Waterbury Plating Company	Waterbury	Dextone Co The	New Haven
Electric Safety Switches		Enameling and Finishing		Fireworks	
Federal Electric Products Co Inc	Hartford	Claireglow Mfg Co	Portland	M Backes' Sons Inc	Wallingford
Electric Shavers		Enamels		Fishing Tackle	
Schick Incorporated	Stamford	Baer Brothers	Stamford	Bevin-Wilcox Line Co The (lines)	East Hampton
Electric Signs		End Milling Cutters		H C Cook Co The 32 Beaver St	Ansonia
Berger Sign Co	Hartford	Pratt & Whitney Div Niles-Bement-Pond Co	West Hartford	Flashlights	
United Advertising Corp	New Haven	Engines		Bond Electric Corporation Division of Olin Industries Inc	New Haven
Electric Switches		Pratt & Whitney Aircraft Div	United Aircraft East Hartford	Bridgeport Metal Goods Mfg Co	Bridgeport
Arrow-Hart & Hegeman Electric Co The	Hartford	Wolverine Motor Works Inc (diesel stationary marine)	Bridgeport	Winchester Repeating Arms Company Division	New Haven
General Electric Company	Bridgeport	Envelopes		Olin Industries Inc	New Haven
Electric Time Controls		Curtis 1000 Inc	Hartford	Flat Springs	
R W Cramer Company Inc The	Centerbrook	United States Envelope Company	Hartford	Bristol Spring Manufacturing Co	Plainville
		Hartford Division	Hartford	Flexible Shaft Machines	
				Pratt & Whitney Div Niles-Bement-Pond Co	West Hartford (Adv.)

IT'S MADE IN CONNECTICUT

Floor & Ceiling Plates

Beaton & Cadwell Mfg Co The New Britain

Fluorescent Lighting Equipment

Fullerton Manufacturing Corp Norwalk
Vanderman Manufacturing Co The Willimantic
Wiremold Company The Hartford

Foam Rubber

B F Goodrich Sponge Products Division Shelton

Forgings

Clark Brothers Bolt Co Middale
Consolidated Industries Inc West Cheshire
Heppenstall Co (all kinds and shapes) Bridgeport

Scovill Manufacturing Company (Non-ferrous) Waterbury 91

Foundries

Connecticut Malleable Castings Co (malleable iron castings) New Haven
Farrel-Birmingham Company Inc (Iron and Steel) Ansonia
Charles Parker Company The (iron, brass, bronze, aluminum) Meriden
Plainville Casting Company (gray, alloy and high tensile irons) Plainville
Producto Machine Company The Bridgeport
Stamford Casting Company Inc (Aluminum, Magnesium and Bronze) Stamford
Turner & Seymour Mfg Co The (gray iron, semi steel and alloy) Torrington
Union Mfg Co (gray iron & semi steel) New Britain
Wilcox Crittenden & Co Inc (iron, brass, aluminum and bronze) Middletown

Fountain Pens and Mechanical Pencils

Waterman Pen Company Inc Seymour

Foundry Riddles

John P Smith Co The 423-33 Chapel St New Haven

Fuel Oil Pump and Heater Sets

Peabody Engineering Corporation Stamford

Furnaces

Norwalk Airconditioning Corp The (warm air oil fired) South Norwalk

Furnace Linings

Mullite Refractories Co The (refractories, super refractories) Shelton

Fuses—Plug and Cartridge

General Electric Company Bridgeport

Gage Blocks

Pratt & Whitney Div Niles-Bement-Pond Co (Alloy steel and Carbide, Hoke and USA) West Hartford

Galvanizing

Malleable Iron Fittings Co Branford
Wilcox Crittenden & Co Inc Middletown

Galvanizing & Electrical Plating

Gillette-Vibber Co The New London

Gaskets

Auburn Manufacturing Company The (from all materials) Middletown
Raybestos Division of Raybestos-Manhattan Inc Bridgeport
Tsingris Die Cutting Corp (from all materials) Waterbury

Gas Range Conversion Burner

Holyoke Heater Corp of Conn Inc Hartford

Gas Scrubbers, Coolers and Absorbers

Peabody Engineering Corporation Stamford

Gauges

Bristol Co The (pressure and vacuum—recording automatic control) Waterbury
Helicoid Gage Division American Chain & Cable Co The (pressure and vacuum) Bridgeport

Manning Maxwell & Moore Inc Stratford
Pratt & Whitney Div Niles-Bement-Pond Co (Precision Measurement all types) West Hartford

Gears

Mitrametric Co The (blanked fine pitch) Torrington

Gears and Gear Cutting

Farrel-Birmingham Company Inc Ansonia
Hartford Special Machinery Co The Hartford

Glass Blowing

Macalaster Bicknell Company New Haven

Glass Cutters

Fletcher-Terry Co The Forestville

Golf Equipment

Horton Mfg Co The (clubs, shafts, balls, bags) Bristol

Greeting Cards

A D Steinbach & Sons Inc New Haven

Grinding

Farrel-Birmingham Company Inc (Roll and Cylindrical) Ansonia
Hartford Special Machinery Co The (gears, threads cams and splines) Hartford
Horberg Grinding Industries Inc (Precision custom grinding; centerless, cylindrical, surfaces, internal and special) 19 Staples St Bridgeport

Grinding Heads—Internal

Pratt & Whitney Div Niles-Bement-Pond Co (Pneumatic, High Speed) West Hartford

Grinding Machines

Farrel-Birmingham Company Inc (Roll) Ansonia
Pratt & Whitney Div Niles-Bement-Pond Co (Surface, Die, Gear and Cutter Grinders) West Hartford
Rowbottom Machine Company Inc (cam) Waterbury

Grommets

American Brass Company The Waterbury
Plume & Atwood Mfg Co The Waterbury

Guards for Machinery

Wheeler Co The G E New Haven

Hack and Band Saw Blades

Capewell Manufacturing Co The Hartford

Hand Tools

Bridgeport Hdwe Mfg Corp The (nail pullers, scout axes, box opening tools, trowels, coping saws, putty knives) Bridgeport

Hard Crome

City Plating Works Inc Bridgeport

Hardness Testers

Wilson Mechanical Instrument Div American Chain & Cable Company Inc Bridgeport

Hardware

Bassick Company The (Automotive) Bridgeport
Harloc Products Corp New Haven
Sargent & Company New Haven
Wilcox Crittenden & Co Inc (marine heavy and industrial) Middletown
Yale & Towne Mfg Co The Stamford

Hardware—Marine & Bus

Rostand Mfg Co The Milford

Hardware—Trailer Cabinet

Excelsior Hardware Co The Stamford

Hardware, Trunk & Luggage

Corbin Cabinet Lock Div American Hardware Corp New Britain
J H Sessions & Son Bristol
Yale & Towne Mfg Co The Stamford

Hat Machinery

Doran Bros Inc Danbury

Health Surgical & Orthopedic Supports

Berger Brothers Company The (custom made for back, breast, and abdomen) New Haven

Heat Exchangers

Whitlock Manufacturing Co The Hartford

Heat Elements

Safeway Heat Elements Inc (woven wire resistance type) Middletown

Heat Treating

A F Holden Co The 52 Richard St West Haven
Bennett Metal Treating Co The 1045 New Britain Ave Elmwood
New Britain-Gridley Machine Division The New Britain Machine Co New Britain
Stanley P Rockwell Co Inc The 296 Homestead Ave Hartford

Heat-Treating Equipment

Autoyre Company The Oakville
Barnes Co The Wallace Div Associated Spring Corp Bristol
A F Holden Company The 52 Richard Street West Haven (Main Plant) Hartford
Bauer & Company Inc Hartford
Rolock Inc (Retorts, Muffles, etc.) Fairfield
Stanley P Rockwell Co Inc The (commercial) 296 Homestead Ave Hartford

Heat Treating Fixtures

Rolock Inc (Trays, Baskets, etc.) Fairfield
Wiretex Mfg Co Inc Bridgeport

Heat Treating Salts and Compounds

A F Holden Company The 52 Richard Street West Haven
Mitchell-Bradford Chemical Co Bridgeport

Heating and Cooling Coils

G & O Manufacturing Co New Haven

Heating Elements

Hartford Element Co Hartford

Heavy Chemicals

Naugatuck Chemical Division United States Rubber Co (sulphuric, nitric and muriatic acids and aniline oil) Naugatuck

Hex-Socket Screws

Bristol Company The Waterbury
Holo-Krome Screw Corp The West Hartford

Highway Guard Rail Hardware

Malleable Iron Fittings Co Branford

Hinges

Homer D Bronson Company Beacon Falls

Hobs and Hobbings

ABA Tool & Die Co Manchester
Pratt & Whitney Div Niles-Bement-Pond Co (Die and Thread Milling) West Hartford

Holsts

J-B Engineering Sales Co New Haven

Holsts and Trolleys

Union Mfg Company New Britain

Home Laundry Equipment

General Electric Company Bridgeport

Hose—Flexible Metallic

American Brass Co Waterbury
American Metal Hose Branch Waterbury

Hose Supporter Trimmings

Hawie Mfg Co The (So-Lo Grip Tabs) Bridgeport

Hospital Signal Systems

Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Hydraulic Brake Fluids

Eis Manufacturing Co Middletown

Hydraulic Controls

Sperry Products Inc Danbury

Hypodermic Needles

Roehr Products Company Waterbury

Ice Buckets

B F Goodrich Sponge Products Division Shelton

Inductors

C G S Laboratories Inc Stamford

Industrial Displays

Sansone Co S Frederick (Designers Builders and Counselors) Short Beach

Industrial Finishes

Atlas Powder Co Zapon Div Stamford
Chemical Coatings Corporation Rocky Hill
United Chromium Incorporated Waterbury

Industrial Tools—Powder Actuated

Remington Arms Company Inc Bridgeport

Infra-Red Equipment

Leeds Electric and Mfg Co The Hartford

Inks

Waterman Pen Company Inc Seymour

Insecticides

American Cyanamid Company Waterbury

Insecticide Bomb

Bridgeport Brass Company (Aer*a*sol) Bridgeport

Insulated Wire & Cable

General Electric Company Bridgeport
Kerite Company The Seymour

Insulated Wire & Cable Machinery

Davis Electric Company Wallingford

Instruments

Bristol Company The Waterbury
J-P-T Instruments Inc (Electrical and Temperature) New Haven
Manning Maxwell & Moore Inc Stratford
Pratt & Whitney Div Niles-Bement-Pond Co (Precision Measuring) West Hartford

Insulation

Gilman Brothers Co The Gilman (Advt.)

IT'S MADE IN CONNECTICUT

Inter-Communications Equipment
Conn Telephone & Electric Corp Subsidiary of
Great American Industries Inc Meriden

Interval Timers
Lux Clock Manufacturing Company Waterbury
Rhodes Inc M H Hartford

Ironing Machines—Electric
General Electric Company Bridgeport

Jacquard
Case Brothers Inc Manchester

Japanning
J H Sessions & Son Bristol

Jig Borer
Moore Special Tool Co (Moore) Bridgeport
Pratt & Whitney Div Niles-Bement-Pond Co
West Hartford

Jig Grinder
Moore Special Tool Co (Moore) Bridgeport

Keller Machines
Pratt & Whitney Div Niles-Bement-Pond Co
West Hartford

Key Blanks
Sargent & Company New Haven
Yale & Towne Mfg Co The Stamford

Labels
J & J Cash Inc (Woven) South Norwalk
Nauvattuck Chemical Division United States
Rubber Co (for rubber articles) Naugatuck

Label Molders
Better Packages Inc Shelton

Laboratory Equipment
Eastern Industries Inc New Haven

Laboratory Supplies
Macalaster Bicknell Company New Haven

Laces
American Fabrics Company The Bridgeport
Wilcox Lace Corporation The Middletown

Laces and Nettings
Wilcox Lace Corporation The Middletown

Lacquers & Synthetic Enamels
Atlas Powder Co Zapon Div Stamford
Baer Brothers Stamford
Chemical Coatings Corporation Rocky Hill
United Chromium Incorporated Waterbury

Ladders
A W Flint Co 196 Chapel St New Haven

Lamps
Plume & Atwood Mfg Co The (metal oil) Waterbury

Lampholders—Incandescent and Fluorescent
General Electric Company Bridgeport

Lamp Shades
Verplex Company The Essex

Lathes—Contin-U-Matic
Bullard Company The (vertical multi-spindle-continuous turning type) Bridgeport

Lathes—30H Man-Au-Trol
Bullard Company The (horizontal 3 spindle) Bridgeport

Lathes—Mult-Au-Matic
Bullard Company The (vertical multi-spindle-indexing type) Bridgeport

Lathes—Toolroom and Automatic
Pratt & Whitney Div Niles-Bement-Pond Co
West Hartford

Lathes—Vertical Turret
Bullard Company The (single spindle) Bridgeport

Laundry Roll Covers
Atlas Powder Co Zapon Div Stamford

Lead Plating
Christie Plating Co The Groton

Leather
Herman Roser & Sons Inc (Genuine Pigskin) Glastonbury

Leather Dog Furnishings
Andrew B Hendryx Co The New Haven
The Smith-Worthington Saddlery Co Hartford

Leather Goods Trimmings
G E Prentice Mfg Co The Kensington

Leather, Mechanical
Auburn Manufacturing Company The (pack-ings, cubs, washers, etc) Middletown

Letterheads
Lehman Brothers Inc (designers, engravers, lithographers) New Haven

Lighting Accessories—Fluorescent
General Electric Company Bridgeport

Lighting Equipment
Fullerton Manufacturing Corp Norwalk
Miller Co The (Miller, Duplexalite, Ivanhoe) Meriden

Lime
New England Lime Company Canaan

Lipstick Containers
Bridgeport Metal Goods Mfg Co Bridgeport
Plume & Atwood Manufacturing Co Waterbury

Lithographers
O'Toole & Sons Inc T Stamford

Lithographing
Kellogg & Bulkeley A Division of Connecticut
Printers Inc Hartford
Lehman Brothers Inc New Haven
A D Steinbach & Sons New Haven

Locks—Banks
Yale & Towne Mfg Co The Stamford

Locks—Builders
Eagle Lock Co The Terryville
Sargent & Company New Haven
Yale & Towne Mfg Co The Stamford

Locks—Cabinet
Eagle Lock Co The Terryville
Excelsior Hardware Co The Stamford
Yale & Towne Mfg Co The Stamford

Locks—Special Purpose
Eagle Lock Co The Terryville
Yale & Towne Mfg Co The Stamford

Locks—Suitcase
Eagle Lock Co The Terryville

Locks—Suit-Case and Trimmings
Excelsior Hardware Co The Stamford

Locks—Trunk
Eagle Lock Co The Terryville
Excelsior Hardware Co The Stamford
Yale & Towne Mfg Co The Stamford

Locks—Zipper
Excelsior Hardware Co The Stamford

Loom—Non-Metallic
Wiremold Company The Hartford

Lumber & Millwork Products
City Lumber Co of Bridgeport Inc Bridgeport

Machetes
Collins Company The Collinsville

Machine Design
Black Rock Mfg Company The Bridgeport

Machine Tools
Bullard Company The Bridgeport
Pratt & Whitney Div Niles-Bement-Pond Co
West Hartford
Producto Machine Company The Bridgeport

Machine Work
Black Rock Mfg Company The Bridgeport
Farrel-Birmingham Company Inc Ansonia
Fenn Manufacturing Company The (precision parts) Newington
Hartford Special Machinery Co The (contract work only) Hartford
National Sheradizing & Machine Co (job) Hartford
Parker Stamp Works Inc The (Special) Hartford
Swan Tool & Machine Co The Hartford
Torrington Manufacturing Co The (special roll-ing mill machinery) Torrington

Machinery
Fenn Manufacturing Company The (special) Newington
Globe Tapping Machine Company (dial type drilling and tapping) Bridgeport
Hallden Machine Company The (mill) Thomaston
Torrington Manufacturing Co The (mill) Torrington

Machinery—Bolt and Nut
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Cold Heading
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery Dealers & Rebuilders
Botwinik Brothers New Haven
J L Lucas and Son Fairfield
State Machinery Co Inc New Haven

Machinery—Extruding
Standard Machinery Co The Mystic

Machinery—Metal-Working
Waterbury Farrel Foundry & Machine Co The Waterbury
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Machinery—Nut
Waterbury Farrel Foundry & Machine Co The (forming and tapping) Waterbury

Machinery—Screw and Rivet
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Wire Drawing
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Wire Straightening
Mettler Machine Tool Inc New Haven

Machines
Campbell Machine Div American Chain & Cable Co Inc (cutting & nibbling) Bridgeport
Coulter & McKenzie Machine Co The (special, new development engineering design and construction) Bridgeport
Patent Button Company The Waterbury

Machines—Automatic
A H Nilson Mach Co The (Special) Bridgeport

Machines—Automatic Chucking
Bullard Company The Bridgeport
New Britain-Gridley Machine Division
The New Britain Machine Co (multiple spindle and double end) New Britain
Pratt & Whitney Div Niles-Bement-Pond Co (Potter & Johnson) West Hartford

Machines—Automatic Screw
New Britain-Gridley Machine Division
The New Britain Machine Co (single and multiple spindle) New Britain

Machines—Automatic Shaft Turning
Bullard Company The (30H lathe—horizontal 3 spindle) Bridgeport

Machines—Brushing
Fuller Brush Co The Hartford

Machines—Contin-U-Matic
Bullard Company The (vertical multi-spindle-continuous turning) Bridgeport

Machines—Draw Benches
Fenn Manufacturing Company The Newington

Machines—Drill Spacing
Bullard Company The (Bullard spacer—used in conjunction with radical drills) Bridgeport

Machines—Drop Hammers
Fenn Manufacturing Company The Newington

Machines—Forming
A H Nilson Mach Co The (four-slide wire and ribbon stock) Bridgeport

Machines—Mult-Au-Matic
Bullard Company The Bridgeport

Machines—Paper Ruling
John McAdams & Sons Inc Norwalk

Machines—Pipe & Bolt Threading
Capewell Mfg Co The Hartford
(Advt.)

IT'S MADE IN CONNECTICUT

Machines—Precision Boring
New Britain-Gridley Machine Division
The New Britain Machine Co New Britain

Machines—Rolling
Fenn Manufacturing Company The Newington

Machine—Slotting
Globe Tapping Machine Company The (High
Production Screw Head Slotting) Bridgeport
Waterbury Farrel Foundry & Machine Co The
(screw head) Waterbury

Machines—Special
Fuller Brush Co The Hartford

Machines—Swaging
Fenn Manufacturing Company The Newington

Machines—Thread Rolling
Hartford Special Machinery Co The Hartford
Waterbury Farrel Foundry & Machine Co The
Waterbury

Machines—Turks Head
Fenn Manufacturing Company The Newington

Machines—Well Drilling
Consolidated Industries West Cheshire

Machines—Wire Drawing
Fenn Manufacturing Company The Newington

Magnesium Castings
Stamford Casting Company Stamford

Manicure Instruments
W E Bassett Company The Derby

Manganese Bronze Ingot
Whipple and Choate Company Bridgeport

Marine Engines
Kilborn-Sauer Company (running lights and
searchlights) Fairfield
Lathrop Engine Co The Mystic

Marine Equipment
Russell Manufacturing Company The (utility
cord and accessory hardware) Middletown
Wilcox Crittenden & Co Inc Middletown

Marine Reserve Gears
Snow-Nabstedt Gear Corp The New Haven

Marking Devices
Hoggson & Pettis Mfg Co The New Haven
Parker Stamp Works Inc The (steel) Hartford

Mats—Newspaper
Lockwood Sons Inc Wm H Hartford

Mattresses
Waterbury Mattress Co Waterbury

Metal Boxes and Displays
Durham Manufacturing Company The Durham
Meriam Mfg Co (Bond, Security, Cash, Util-
ity, Personal Files, Drawer Sales, Custombilt
containers and displays) Durham
Charles Parker Co (sheet metal fabricators) Meriden

Metal Cleaners
Apothecaries Hall Co Waterbury
Ethon Inc New Haven
MacDermid Incorporated Waterbury

Metal Cleaning Machines
Colt's Manufacturing Company Hartford

Metal Finishes
Ethon Inc New Haven
Mitchell-Bradford Chemical Co Bridgeport
United Chromium Incorporated Waterbury

Metal Finishing
National Sheradizing & Machine Co Hartford
Waterbury Plating Company Waterbury

Metal Formings
Master Engineering Company West Cheshire
Stanley Pressed Metal New Britain

Metalizing
Conn Metal Finishing Co Hamden

Metal Novelities
H C Cook Co The 32 Beaver St Ansonia

Metal Products—Stampings
American Brass Company The Waterbury
Plume & Atwood Manufacturing Co Waterbury

Metal Products—Stampings
J H Sessions & Son Waterbury
Scovill Manufacturing Company (Made-to-Order) Waterbury 91
Stanley Pressed Metal New Britain

Metal Specialties
Excelsior Hardware Co The Stamford

Metal Stampings
American Brass Company The Waterbury
Autore Co The (Small) Oakville
Bridgeport Chain & Mfg Co Bridgeport
DooVal Tool & Mfg Inc The Naugatuck
Excelsior Hardware Co The Stamford
Greist Mfg Co The 503 Blake St New Haven
H C Cook Co The 32 Beaver St Ansonia
Humason Mfg Co The Forestville
J A Otterbein Company The (metal fabrica-
tions) Middletown
J H Sessions & Son Waterbury
Patent Button Co The Kensington
G E Prentice Mfg Co The Waterbury
Plume & Atwood Mfg Co The Waterbury
Saling Manufacturing Company Unionville
Stanley Pressed Metal New Britain
Swan Tool & Machine Co The Hartford
United States Rubber Company Shoe Hard-
ware Division Waterbury
Verplex Company The (Contract) Essex
Waterbury Lock & Specialty Co The Milford

Meters—Gas
Sprague Meter Company Bridgeport

Meters—Parking
Rhodes Inc M H Hartford

Microfilming
American Microfilming Service Company New Haven

Microscope—Measuring
Lundeborg Engineering Company Hartford

Milk Bottle Carriers
John P Smith Co The 423-33 Chapel St
New Haven

Millwork
Hartford Builders Finish Co Hartford

Milling Machines
Pratt & Whitney Div Niles-Bement-Pond Co
(Keller Tracer—Controlled Milling Machines) West Hartford
Rowbottom Machine Company Inc (cam) Waterbury

Mill Supplies
Wilcox Crittenden & Co Inc Middletown

Miniature Precision Connectors
Gorn Electric Co Stamford

Minute Minders
Lux Clock Mfg Co The Waterbury

Mirror Rosettes and Hangers
Waterbury Companies Inc Waterbury

Mixing Equipment
Eastern Industries Inc New Haven
Gabb Special Products Div. The E Horton &
Son Co Windsor Locks

Mops
Fuller Brush Co The Hartford

Motor Control Centers
Distribution Assemblies Department, General
Electric Co Plainville

Moulded Plastic Products
Butterfield Inc T F Naugatuck
Colt's Manufacturing Company Hartford
Patent Button Co The Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The 117 Echo Lake Road
Watertown

Mouldings
Himmel Brothers Co The (architectural, metal
and store front) Hamden

Moulds
ABA Tool & Die Co Manchester
Hoggson & Pettis Mfg Co The (steel) New Haven
114 Brewery St New Haven
Lundeborg Engineering Company (plastics) Hartford

Moulds
Parker Stamp Works Inc The (compression
injection & transfer for plastics) Hartford

Napper Clothing
Standard Card Clothing Co The (for textile
mills) Stafford Springs

Nettings
Wilcox Lace Corp The Middletown

Newspaper Mats
Lockwood Sons Inc Wm H Hartford

Nickel Anodes
Apothecaries Hall Co Waterbury
Seymour Mfg Co The Seymour

Nickel Silver
American Brass Company The Waterbury
Plume & Atwood Mfg Co The Waterbury
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips,
rolls) Waterbury
Western Brass Mills Division of Olin Indus-
tries Inc (sheet, strip) New Haven

Nickel Silver Ingot
Whipple and Choate Company The Bridgeport

Night Latches
Sargent & Company New Haven
Yale & Towne Mfg Co Inc Stamford

Non-ferrous Metal Castings
Miller Company The Meriden
Charles Parker Co Meriden

Nuts, Bolts and Washers
Clark Brothers Bolt Co Milldale

Office Equipment
Pitney-Bowes Inc Stamford
Underwood Corporation Bridgeport & Hartford

Offset Printing
Kellogg & Bulkeley A Division of Connecticut
Printers Inc Hartford

Oil Burners
Miller Company The (domestic) Meriden
Peabody Engineering Corp (Mechanical and/or
Steam Atomizer) Meriden
Silent Glow Oil Burner Corp The Hartford
1477 Park St

Oil Tanks
Norwalk Tank Co The (550 to 30M gals, under-
writers above and under ground) South Norwalk
Whitlock Manufacturing Co The Hartford

Oils—Cutting
Anderson Oil Co Inc F E Portland

Open Knife Switches and Accessories
Trumbull Components Department, General
Electric Co Plainville

Optical Cores & Ingots
Plume & Atwood Mfg Co The Thomaston

Otis Woven Awning Stripes
The Falls Company Norwich

Nickel Silver Ingot
Whipple and Choate Company The Bridgeport

Night Latches
Sargent & Company New Haven
Yale & Towne Mfg Co Inc Stamford

Non-ferrous Metal Castings
Miller Company The Meriden
Charles Parker Co Meriden

Nuts, Bolts and Washers
Clark Brothers Bolt Co Milldale

Office Equipment
Pitney-Bowes Inc Stamford
Underwood Corporation Bridgeport & Hartford

Offset Printing
Kellogg & Bulkeley A Division of Connecticut
Printers Inc Hartford

Oil Burners
Miller Company The (domestic) Meriden
Peabody Engineering Corp (Mechanical and/or
Steam Atomizer) Meriden
Silent Glow Oil Burner Corp The Hartford
1477 Park St

Oil Tanks
Norwalk Tank Co The (550 to 30M gals, under-
writers above and under ground) South Norwalk
Whitlock Manufacturing Co The Hartford

Oils—Cutting
Anderson Oil Co Inc F E Portland

Open Knife Switches and Accessories
Trumbull Components Department, General
Electric Co Plainville

Optical Cores & Ingots
Plume & Atwood Mfg Co The Thomaston

Otis Woven Awning Stripes
The Falls Company Norwich

Outlets—Electric
General Electric Company Bridgeport

Ovens—Electric
Bauer & Company Inc Hartford

Package Sealers
Better Packages Inc Shelton

Packaging
Local Industries Inc (merchandising displays
and packaging in wood) Lakeville

Packaging Machinery
Colt's Manufacturing Company (box making
machinery. Trade mark "Rite Size") Hartford

Packing
Auburn Manufacturing Company The (leather,
rubber, asbestos, fibre) Middletown
Raybestos Division of Raybestos-Manhattan
Inc (Asbestos and Rubber Sheet) Bridgeport

Pads—Office
The Baker Goodyear Company New Haven

Padlocks
Sargent & Company New Haven
Waterbury Lock & Specialty Co The Milford
Yale & Towne Mfg Co Inc Stamford

Paints
Baer Brothers Stamford

Paints and Enamels
Staminate Corp The New Haven

Panta
Moore Special Tool Co (crush wheel dresser)
Bridgeport

Panelboards—Lighting and Distribution
Distribution Assemblies Department, General
Electric Co Plainville

Paperboard
Gair Company Inc Robert Montville
Robertson Paper Box Co Montville
New Haven Pulp and Board Co The New Haven

Paper Boxes
Atlantic Carton Corp (folding) Norwich
Gair Co Inc Robert (folding) Montville
National Folding Box Co Inc (folding) New Haven

Paper Boxes—Folding and Setup
Bridgeport Paper Box Company Bridgeport
M Backs' Sons Inc Wallingford

Paper Clips
H C Cook Co The (steel) 32 Beaver St Ansonia
(Adv.)

IT'S MADE IN CONNECTICUT

Paper Mill Machinery Farrel-Birmingham Company Inc Ansonia	Plastic—Moulders Colt's Manufacturing Company Hartford General Electric Company Waterbury Waterbury Companies Inc Waterbury Watertown Mfg Co The Watertown	Printing Machinery Banthin Engineering Co (automatic) Bridgeport Thomas W Hall Company Stamford
Paper Tags and Pin Tickets Waterbury Buckle Co Waterbury	Plastics—Moulds & Dies Parker Stamp Works Inc The (for plastics) Hartford	Printing Plates Lockwood Sons Inc Wm H Hartford
Paper Tubes and Cores Sonoco Products Co (Climax-Lowell) Div Mystic	Plasticrete Bloc Plasticrete Corp Hamden	Printing Rollers Chambers-Storck Company Inc The (engraved) Norwich
Parallel Tubes Sonoco Products Co (Climax-Lowell) Div Mystic	Plates—Switch General Electric Company Bridgeport	Production Control Equipment Ripley Company Inc Middletown
Parkerizing Clairglow Mfg Company Portland	Platers American Metal Products Company Inc Bridgeport	Production Welding Consolidated Industries West Cheshire
Parking Meters Rhodes Inc M H Hartford	Plating Christie Plating Co The (including lead plating) Groton Patent Button Co The Waterbury Waterbury Plating Company Waterbury Chromium Process Company The (Chromium Plating only) Derby	Profilers Pratt & Whitney Div Niles-Bement-Pond Co West Hartford
Passenger Car Sander Conn Telephone & Electric Corp Subsidiary of Meriden Great American Industries Inc	Platers' Equipment Apothecaries Hall Company Waterbury Conn Metalcraft Inc New Haven Lea Manufacturing Co The Waterbury MacDermid Incorporated Waterbury	Propellers—Aircraft Hamilton Standard Div United Aircraft Corp (propellers and other aircraft equipment) Windsor Locks
Pattern-Makers Farrel-Birmingham Company Inc Ansonia	Platers Metal Plume & Atwood Mfg Co The Thomaston	Protective Coatings Harrison Company The A S (Waxes) South Norwalk
Penlights Bridgeport Metal Goods Mfg Co Bridgeport	Plating Christie Plating Co The (including lead plating) Groton Conn Metal Finishing Co Hamden	Publishers O'Toole & Sons Inc T Stamford
Pet Furnishings Andrew B Hendrix Co The New Haven	Plating Processes and Supplies Enthone Inc New Haven United Chromium Incorporated Waterbury	Pumps Yale & Towne Mfg Co The Stamford
Pharmaceutical Specialties Ernst Bischoff Company Inc Ivoryton	Plumbers' Brass Goods Bridgeport Brass Co Bridgeport Keeney Mfg Co The (special bends) Newington Scovill Manufacturing Company Waterbury 48	Pumps—Small Industrial Eastern Industries Inc New Haven
Phosphor Bronze American Brass Company The Waterbury Miller Company The (sheets, strips, rolls) Meriden Seymour Mfg Co The Waterbury Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury Western Brass Mills Division of Olin Industries Inc (sheet, strip) New Haven	Plumbing Specialties John M Russell Mfg Co Inc Naugatuck	Pump Valves Colt's Manufacturing Company Hartford
Phosphor Bronze Ingots Whipple and Choate Company The Bridgeport	Police Equipment The Smith-Worthington Saddlery Co Hartford	Punches Hoggson & Pettis Mfg Co The (ticket & cloth) 141 Brewery St New Haven
Photographic Equipment Kalart Company Inc Plainville	Polishing Wheels Williamsville Buff Div The Bullard Clark Company Danielson	Putty Softeners—Electrical Fletcher Terry Co The Box 415 Forestville
Piano Repairs Pratt Read & Co Inc (keys and action) Ivoryton	Poly Chokes Poly Choke Company The (a shotgun choking device) Tariffville	Pyrometers Bristol Co The (recording and controlling) Waterbury
Piano Supplies Pratt Read & Co (keys and actions, backs, plates) Ivoryton	Postage Meters Pitney Bowes Inc Stamford	Radiation—Finned Copper Bush Manufacturing Co West Hartford G & O Manufacturing Company The New Haven
Pins CEM Company ("Spirol") Danielson	Potentiometers—Electronic Bristol Company The Waterbury	Radiators—Engine Cooling G & O Manufacturing Co New Haven
Pin Up Lamps Verplex Company The Essex	Power Rollers Consolidated Industries Inc West Cheshire	Rayon Staple Fiber Hartford Rayon Corp The Rocky Hill
Pipe American Brass Co The (brass and copper) Waterbury Bridgeport Brass Co (brass and copper) Bridgeport Chas Brass & Copper Co (red brass and copper) Waterbury Howard Co (cement well and chimney) New Haven	Prefabricated Buildings City Lumber of Bridgeport Inc Bridgeport	Reamers Pratt & Whitney Div Niles-Bement-Pond Co (All types) West Hartford
Pipe Fitter's Hand Tools & Machines Capewell Mfg Co The Hartford	Premium Specialties Waterbury Companies Inc Waterbury	Recorders Bristol Co The (automatic controllers, temperature, pressure, flow, humidity) Waterbury
Pipe Fittings Corley Co Inc Plainville Malleable Iron Fittings Co Branford	Preservatives—Wood, Rope, Fabric Darworth Incorporated ("Cuprinol") Simsbury	Reduction Gears Farrel-Birmingham Company Inc Ansonia Snow-Nabstedt Gear Corp The New Haven
Pipe Plugs Holo-Krome Screw Corporation The (counter-sunk) West Hartford	Press Papers Case Brothers Inc Manchester	Refractories Howard Company New Haven Mullite Refractories Company The Shelton
Pipe Plugs—Socketed Holo-Krome Screw Corp The West Hartford	Presses Farrel-Birmingham Company Inc (Hydraulic) Ansonia	Refrigeration Bowser Technical Refrigeration Div Bowser Inc (high altitude, low temperature) Terryville
Plastics B F Goodrich Sponge Products Division Shelton Naugatuck Chemical Division United States Rubber Co Naugatuck	Presses—Molding Standard Machinery Co The (compression and transfer molding, automatic and semi-automatic) Mystic	Regulators Norwalk Valve Company (for gas and air) South Norwalk Sorensen & Company Inc Stamford
Plastic Buttons Frank Parizek Manufacturing Co The West Willington	Presses—Power Waterbury Farrel Foundry & Machine Co The Waterbury	Remote Control Wiring General Electric Company Bridgeport
Patent Button Co The Waterbury	Pressure Vessels Norwalk Tank Co Inc The (unfired to ASME Code Par U 69-70) South Norwalk Whitlock Manufacturing Co The Hartford	Resistance Wire C O Jelliff Mfg Co The (nickel chromium, copper nickel, iron chromium, aluminum) Southport Kanthal Corporation The Stamford
Plastic Gems Colt's Manufacturing Company Hartford	Printing Case Lockwood & Brainard A Division of Connecticut Printers Inc Hartford Finlay Brothers Hartford Heminway Corporation The Waterbury Hildreth Press Bristol Hunter Press Hartford Lehman Brothers Inc New Haven Taylor & Greenough Co The Wethersfield T B Simonds Inc Hartford A D Steinbach & Sons New Haven The Walker-Rackliff Company New Haven	Respirators American Optical Company Safety Products Putnam
Plastic Materials American Cyanamid Co (Molding Compounds, Adhesives, Laminating Resins) Wallingford		Retainers Hartford Steel Ball Co The (bicycle & automotive) Hartford
Plastic Printing Plates Lockwood Sons Inc Wm H Hartford		Riveting Machines Grant Mfg & Machine Co The Bridgeport Ripley Company Inc Middletown H P Townsend Manufacturing Co The Elmwood (Advt.)
Plastics Machinery Black Rock Mfg Company The Bridgeport Farrel-Birmingham Company Inc Ansonia		
Plastic Molders Plastic Molding Corporation Sandy Hook		
Plastic Molding Butterfield, Inc T F Naugatuck U S Plastic Molding Corporation Wallingford		

IT'S MADE IN CONNECTICUT

Rivets		Safety Gloves and Mittens		Shaving Soaps	
Blake & Johnson Co The (brass, copper and non-ferrous)	Waterville	American Optical Company Safety Division	Putnam	J B Williams Co The	Glastonbury
Clark Brothers Bolt Co	Milldale	Safety Goggles		Shears	
Plume & Atwood Mfg Co The	Waterbury	American Optical Company Safety Division	Putnam	Acme Shear Co The (household)	Bridgeport
Raybestos Div of Raybestos-Manhattan Inc The (brass and aluminum tubular and solid copper)	Bridgeport	Safety Switches		Shells	
Raybestos Div of Raybestos-Manhattan Inc The (iron)	Bridgeport	Trumbull Components Department, Electric Co	General Plainville	Wolcott Tool and Manufacturing Company Inc	Waterbury
Rods		Saw Blades—Hack		Sheet Metal Products	
American Brass Company The (copper, brass, bronze)	Waterbury	Capewell Mfg Co The	Hartford	American Brass Co The (brass and copper)	Waterbury
Bristol Brass Corp The (brass and bronze)	Bristol	Saws—Metal & Wood Cutting Band		Merriam Mfg Co (security boxes, fitted tool boxes, tackle boxes, displays)	Durham
Scovill Manufacturing Company (brass and bronze)	Waterbury 91	Capewell Mfg Co The	Hartford	Charles Parker Co (sheet metal fabricators)	Meriden
Rollers—Bituminous Paving		Saws, Band, Metal Cutting		Plume & Atwood Mfg Co The	Waterbury
Gabb Special Products Div E Horton & Son Company	Windsor Locks	Atlantic Saw Mfg Co	New Haven	United Manufacturing Co Division of The W L Maxson Corp	Hamden
Roller Skate Wheels		Scales—Industrial Dial		Sheet Metal Stampings	
Raybestos Division of Raybestos-Manhattan Inc	Bridgeport	Kron Company The	Bridgeport	American Brass Company The	Waterbury
Roller Skates		Scissors		American Buckle Co The	West Haven
Winchester Repeating Arms Company Division	New Haven	Acme Shear Company The	Bridgeport	DooVal Tool & Mfg Inc The	Naugatuck
Olin Industries Inc	New Haven	Screens		J H Sessions & Son	Bristol
Rolling Mills and Equipment		Hartford Wire Works Co The (Windows, Doors and Porches)	Hartford	Patent Button Co The	Waterbury
Farrel-Birmingham Company Inc	Ansonia	Screw Caps		Plume & Atwood Mfg Co The	Waterbury
Waterbury Farrel Foundry & Machine Co	Waterbury	Weimann Bros Mfg Co The (small for bottles)	Derby	Shipment Sealers	
Rolls		Screw Machine Accessories		Better Packages Inc	Shelton
Farrel-Birmingham Company Inc (Chilled and Alloy Iron, Steel)	Ansonia	Barnaby Manufacturing and Tool Co	Bridgeport	Showcase Lighting Equipment	
Rope Wire		Screw Machines		Wiremold Company The	Hartford
American Steel & Wire Div of U S Steel	New Haven	H P Townsend Mfg Company The	Elmwood	Signals	
Rubber Chemicals		Screw Machine Products		H C Cook Co The (for card files)	Ansonia
Naugatuck Chemical Division United States Rubber Co	United States	Apex Tool Co Inc The	Bridgeport	32 Beaver St	Ansonia
Stamford Rubber Supply Co The ("Factice" Vulcanized Vegetable Oils)	Stamford	Blake & Johnson Co The	West Cheshire	Signs	
Rubber—Cellular		Consolidated Industries	New Haven	Berger Sign Co (neon electric-porcelain enamel-stainless steel)	Hartford
B F Goodrich Sponge Products Division	Shelton	Eastern Machine Screw Corp The	Winsted	Silk Screening on Metal	
Rubber Cutting Machinery		Truman & Barclay Sts	Hartford	Merriam Mfg Co (Displays and Specialties, to order)	Durham
Black Rock Mfg Company The	Bridgeport	Fairchild Screw Products Inc	Hartford	Sintered Metal Products	
Rubber Printing Plates		Franklin Screw Machine Co The (up to 1½" capacity)	New Haven	Raybestos Division of Raybestos-Manhattan Inc	Bridgeport
Lockwood Sons Inc Wm H	Hartford	Geist Mfg Co The (Up to 1½" capacity)	New Haven	Sizing and Finishing Compounds	
Rubberized Fabrics		Horberg Grinding Industries Inc (Heat treated and ground type only)	Bridgeport	American Cyanamid Company	Waterbury
Duro-Gloss Rubber Co The	New Haven	19 Staples Street	Forestville	Slide Fasteners	
Rubber Footwear		Humason Mfg Co The	West Haven	G E Prentice Mfg Co The	Kensington
Goodyear Rubber Co The	Middletown	Kerrin Company	Wethersfield	North & Judd Manufacturing Co	New Britain
Rubber Gloves		Lowie Mfg Co The	Berlin	Patent Button Co The	Waterbury
Seamless Rubber Company The	New Haven	National Automatic Products Company The	Plantville	Slings	
Rubber—Handmade Specialties		Nelson's Screw Machine Products	New Britain	American Steel & Wire Div of U. S. Steel	New Haven
Seamless Rubber Company The	New Haven	New Britain Machine Company The	Plainville	Smoke Stacks	
Rubber—Latex Foam		Olson Brothers Company (up to ¼" capacity)	Southington	Bigelow Company The (steel)	New Haven
B F Goodrich Sponge Products Division	Shelton	Olson & Sons R P	Plainville	Norwalk Tank Co The	South Norwalk
Rubber Latex Compounds and Dispersions		Peck Spring Co The	Waterbury	Soap	
Naugatuck Chemical Division United States Rubber Co (coating, impregnating and adhesive compounds)	Naugatuck	Plume & Atwood Mfg Co The	Waterbury 91	J B Williams Co The (industrial soaps, toilet soaps, shaving soaps)	Glastonbury
Rubber Mill Machinery		Scovill Manufacturing Company	Waterbury	Special Machinery	
Farrel-Birmingham Company Inc	Ansonia	Waterbury Machine Tools & Products Co (Brown & Sharpe and Davenport)	Waterbury	Black Rock Mfg Company The	Bridgeport
Rubber—Molded Specialties		Screw Machine Tools		Farrel-Birmingham Company Inc	Ansonia
Canfield Co The H O	Bridgeport	American Cam Company Inc (Circular Form Tools)	Hartford	H P Townsend Mfg Company The	Elmwood
Seamless Rubber Company The	New Haven	Pratt & Whitney Div Niles-Bement-Pond Co (Reamers, Taps, Dies, Blades and Knurls)	West Hartford	Lundberg Engineering Company	Hartford
Rubber Products—Mechanical		Somma Tool Co (precision circular form tools)	Waterbury	National Sheradizing & Machine Co (mandrels & stock shells for rubber industry)	Hartford
Auburn Manufacturing Company The (washers, gaskets, molded parts)	Middletown	Screws		Swan Tool & Machine Co The	Hartford
Canfield Co The H O	Bridgeport	American Screw Company	Willimantic	Special Parts	
Seamless Rubber Company The	New Haven	Atlantic Screw Works (wood)	Hartford	Geist Mfg Co The (small machines, especially precision stampings)	New Haven
Rubber—Reclaimed		Blake & Johnson Co The (machine and wood)	Waterville	J H Sessions & Son	Bristol
Naugatuck Chemical Division United States Rubber Co	Naugatuck	Bristol Company The (socket set and socket cap screws)	Waterbury	Special Tool & Dies	
Rubbers		Clark Brothers Bolt Co	Milldale	Lundberg Engineering Company	Hartford
Naugatuck Chemical Div U S Rubber Co (special synthetic)	Naugatuck	Eagle Lock Co The	Terryville	Spinnings	
Rubbish Burners		Holo-Krome Screw Corporation The (socket set and socket cap)	West Hartford	American Metal Products Company Inc	Bridgeport
John P Smith Co The	423-33 Chapel St New Haven	Scovill Manufacturing Company	Waterbury 91	Gray Manufacturing Company The	Hartford
Rust Preventives		Superior Manufacturing Co The	Winsted	Sponge Rubber	
Anderson Oil Co Inc F E	Portland	Screw—Sockets		B F Goodrich Sponge Products Division	Shelton
Saddlery		Allen Manufacturing Company The	Hartford	Spray Painting Equipment and Supplies	
The Smith-Worthington Saddlery Co	Hartford	Bristol Co The	Waterbury	Lea Manufacturing Co The	Waterbury
Safety Clothing		Holo-Krome Screw Corp The	West Hartford	Spring Coiling Machines	
American Optical Company Safety Division	Putnam	Sealing Tape Machines		Torrington Manufacturing Co The	Torrington
Safety Fuses		Better Packages Inc	Shelton	Spring Units	
Ensign-Bickford Co The (mining & detonating)	Simsbury	Service Entrance Equipment		Owen Silent Spring Division American Chain & Cable Company Inc	Bridgeport
		Trumbull Components Department, Electric Co	General Plainville	Spring Washers	
		Sewing Machines		Barnes Co The Wallace Div Associated Spring Corp	Spring Bristol (Adv.)
		Geist Mfg Co The (Sewing Machine attachments)	503 Blake St New Haven		
		Marrow Machine Co The (Industrial)	Hartford		
		Singer Manufacturing Company The (Industrial)	Bridgeport		

[66]

IT'S MADE IN CONNECTICUT

Tubes—Collapsible Metal
Sheffield Tube Corp The New London

Tubing
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Company (brass and copper) Bridgeport
G & O Manufacturing Co (finned) New Haven
Scoville Manufacturing Company (Brass and Copper) Waterbury 91

Tubing—Flexible Metallic
American Brass Co Metal Hose Waterbury Branch

Tubing—Heat Exchanger
American Brass Company The Waterbury
Scovill Manufacturing Company Waterbury 91

Tumbling Equipment & Supplies
Tumbling Sales & Service Company Greenwich

Tumbling Service
Tumbling Sales & Service Company, Esbec
Tumbling Division Meriden

Typewriters
Royal Typewriter Co Inc Hartford
Underwood Corporation Hartford

Typewriters—Portable
Royal Typewriter Company Inc Hartford
Underwood Corporation Hartford

Typewriter Ribbons and Supplies
Royal Typewriter Company Inc Hartford
Underwood Corporation Hartford and Bridgeport

Undercleanser Rolls
Sonoco Products Co (Climax-Lowell Div) Mystic

Vacuum Bottles and Containers
American Thermos Bottle Co Norwich

Vacuum Cleaners
Electrolux Corporation Old Greenwich
Spencer Turbine Co The Hartford

Valves
Norwalk Valve Company (sensitive check valves) South Norwalk

Valve Discs
Colt's Manufacturing Company Hartford

Valve—Automobile Tire
Bridgeport Brass Company Bridgeport

Valves—Radiator Air
Bridgeport Brass Company Bridgeport

Valves—Relief & Control
Beaton & Caldwell Mfg Co New Britain

Valves—Safety & Relief
Manning Maxwell & Moore Inc Stratford

Vanity Boxes
Bridgeport Metal Goods Mfg Co Bridgeport
Plume & Atwood Manufacturing Co Waterbury

Varnishes
Baer Brothers Stamford
Staminite Corp The New Haven

Vegetable Peelers
Colt's Manufacturing Company Hartford

Velvets
American Velvet Co (owned and operated by A Wimpheimer & Bro Inc) Stonington
Leiss Velvet Mfg Co Inc The Wilimantic
Velvet Textile Corporation The (Velveteen) West Haven

Venetian Blinds
Findell Manufacturing Company Manchester
Jennings Company The S Barry New Haven
New England Shade & Blind Co Inc Durham

Venetian Blind Tape
Russell Manufacturing Company The (woven cotton and woven plastic) Middletown

Ventilating Systems
Colonial Blower Company Plainville

Vertical Shapers
Pratt & Whitney Div Niles-Bement-Pond Co West Hartford

Vibrators—Pneumatic
Branford Co The (industrial) New Haven

Vises
Charles Parker Co The Meriden
Fenn Manufacturing Company The (Quick-Action Vises) Newington
Vanderman Manufacturing Co The (Combination Bench Pipe) Willimantic

Washers
American Felt Co (felt) Glenville
Auburn Manufacturing Company The (all materials) Middletown
Blake & Johnson The (brass, copper & non-ferrous) Waterville

Washers (Continued)
Clark Brothers Bolt Co Milldale
Plume & Atwood Mfg Co The (brass & copper) Waterbury
J H Rosenbeck Inc Torrington
Saling Manufacturing Company (made to order) Unionville

Washers—Felt
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Washing Machines—Electric
General Electric Company Bridgeport

Watches
E Ingraham Co The Bristol
United States Time Corporation The Waterbury

Water Heaters
Whitlock Manufacturing Co The (instantaneous & storage) Hartford

Water Heaters—Electric
Bauer & Company Inc Hartford

Water Heaters—Gas or Kerosene
Holyoke Heater Corp of Conn Inc Hartford

Waterproof Dressings for Leather
Viscol Company The Stamford

Waxes
Harrison Company The A S (and other protective coatings) South Norwalk

Waxes—Floor
Fuller Brush Co The Hartford

Wedges
Saling Manufacturing Company (hammer & axe) Unionville

Welding
Farrel-Birmingham Company Inc Ansonia
G E Wheeler Company (Fabrication of Steel & Non-Ferrous Metals) New Haven
Industrial Welding Company (Equipment Manufacturers—Steel Fabricators) Hartford
Porupine Company The Bridgeport

Welding—Lead
Storts Welding Company (tanks and fabrication) Meriden

Welding Rods
American Brass Company The Waterbury
Bristol Brass Co The (brass & bronze) Bristol

Wheels—Industrial
George P Clark Co Windsor Locks

Wicks
Auburn Manufacturing Company The (felt, asbestos) Middletown
Holyoke Heater Corp of Conn Inc Hartford

Window & Door Guards
Hartford Wire Works Co The Hartford
Smith Co The John P New Haven

Window Shades
New England Shade & Blind Co Inc Durham

Wiping Cloths
Federal Textile Corporation New Haven

Wire
American Brass Company The Waterbury
American Steel & Wire Div of U S Steel New Haven

Atlantic Wire Co The (steel)
Branford
Bartlett Hair Spring Wire Co The (hair spring) North Haven

Bridgeport Brass Company (brass and silicon bronze)
Bridgeport
Bristol Brass Corp The (brass & bronze) Bristol
Driscoll Wire Co The (steel) Shelton

Hudson Wire Co Winsted Div (insulated & enameled magnet)
Winsted
Platt Bros & Co The (zinc wire) Waterbury
P O Box 1030

Plume & Atwood Mfg Co The (brass, bronze, nickel silver)
Thomaston
Scovill Manufacturing Company (Brass, Bronze and Nickel Silver) Waterbury 91

Wire and Cable
General Electric Company (for residential, commercial and industrial applications) Bridgeport

Wire Arches & Trellises
Hartford Wire Works Co The Hartford
John P Smith Co The 423-33 Chapel St New Haven

Wire Baskets
Wiretex Mfg Co Inc (Industrial, for acid, heat, treating and degreasing) Bridgeport

Wire Cable
Bevin-Wilcox Line Co The (braided) East Hampton

Wire Cloth
Hartford Wire Works Co The Hartford
C O Jelliff Mfg Co The (all metal, all meshes) Southport
Pequot Wire Cloth Co Inc Norwalk
Rolock Inc (Alloy) Fairfield
Smith Co The John P New Haven

Wire Drawing Dies
Waterbury Wire Die Co The Waterbury

Wire Dipping Baskets
Hartford Wire Works Co The Hartford
John P Smith Co The 423-33 Chapel St New Haven

Wire Formings
Autoyre Co The Oakville
G E Prentice Mfg Co The Kensington
Master Engineering Company West Cheshire
North & Judd Manufacturing Co New Britain
Turner & Seymour Manufacturing Co The Torrington
Essex

Wire Forms
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The Hartford
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
New England Spring Mfg Co Unionville
Templeman Co D R Plainville

Wire Goods
American Buckle Co The (overall trimmings) West Haven
Patent Button Co The Waterbury
Scovill Manufacturing Company (To Order) Waterbury 91

Wire Partitions
Hartford Wire Works Co The Hartford
John P Smith Co The 423-33 Chapel St New Haven

Wire Products
Clairglow Mfg Company Portland
Humason Mfg Co The Forestville
Plume & Atwood Mfg Co The (to order) Waterbury

Wire Reels
A H Nilson Mach Co The Bridgeport

Wire Rings
American Buckle Co The (pan handles and tinners' trimmings) West Haven
Humason Mfg Co The Forestville
Templeman Co D R Plainville

Wire Rope and Strand
American Steel & Wire Div of U S Steel New Haven

Wire Shapes
Bridgeport Chain & Mfg Co Bridgeport

Wire—Specialties
Andrew B Hendryx Co The New Haven

Wire and Cable
Rockbestos Products Corporation (all asbestos, mining, shipboard and appliance applications) New Haven

Wooden Boxes
Wallingford Planing Mill Co Inc Yalesville

Wood Handles
Salisbury Cutlery Handle Co The (for cutlery & small tools) Salisbury

Wood Scrapers
Fletcher-Terry Co The Forestville

Woodwork
C H Dresser & Sons Inc (Mfg all kinds of woodwork) Hartford
Hartford Builders Finish Co Hartford

Woodworking
Local Industries Inc Lakeville

Woven Felts—Wool
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Yarns
Hartford Spinning Incorporated (Woolen, knitting and weaving yarns) Unionville
Aldon Spinning Mills Corporation The (fine woolen and specialty) Talcottville
Ensign-Bickford Co The (jute-carpet) Simsbury

Zinc
Platt Bros & Co The (ribbon, strip and wire) Waterbury
P O Box 1030

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The Bilco Story

(Continued from page 55)

man in another respect. It is made in three sizes to fit the basement entrances that are standard in most modern dwelling construction.

Aside from its practicability, Lyons says the popularity of this "best basement door" has been greatly stimulated by the manner in which it is packaged. Whether for home or professional use, its components—everything needed to assemble it but the screw driver—are in a space-saving flat corrugated carton securely fastened with metal straps, which just don't loosen. Storage and transportation offer no problem.

Lyons says he considers newspaper advertising his best means of reaching the home handyman, with the so-called "home" magazines second best. But trade publications are used to interest the professionals of the building trade for all three of the company's products, especially the roof scuttle and the sidewalk door.

The company moves its products through a system of state distributors of which there are now 38.

But, proud as he is of his company's decade of growth, Lyons refuses to lose sight of "the team that has made it possible. Quality, which makes friends and customers, is in the last analysis controlled by the production worker, including, he says, those who plan and administer the program. And this, of course, includes his five sons of whom he is inordinately proud. None of them, he says, "had to be asked to work for dad," but eagerly volunteered when they became old enough.

To his third son, Robert, a 31-year-old graduate of Rensselaer Polytechnic Institute at Troy, N.Y., Lyons gives full credit for what amounts to a 200 percent boost in production. Bob, whose father calls him "a crackerjack engineer," cut the production time of a hatchway from three and a half man hours to an hour and 20 minutes. Understandably, he's production boss as well as head of personnel and shipping.

Of the other sons, George, Jr., 37, heads up engineering and design; John, 35, bosses sales and advertising and does what his father calls "a great job"; Edward, 29, looks after purchasing and credit. William, 27, does a dual job. On his own, "because he likes to do things with his hands," he is a building contractor. At BILCO he

looks after the company's construction and maintenance needs.

Slender, graying Lyons, at 60 a former iron worker and draftsman, grins a little when he describes his job.

"There isn't much for the old man to do," he says, "but just sit around and be proud of five fine sons."

Advertising Index

Allen, Russell & Allen	24
American Appraisal Co.	54
American Microfilming Co.	46
American Thread Co., The	44
Anderson-Nichols & Co.	23
Auburn Mfg. Co.	47
Ballard Oil Co., The	Outside Back Cover
Barnes Co., Wallace	38
Barney's	37
Bigelow Co., The	42
Bristol Co., The	39
Champlin Box Co., The	48
Chase Brass & Copper Co.	48
Clark Bros. Belt Co.	54
Colonial Blower Co.	28
Connecticut Advertising Services	56
Conn. Medical Service	36
Connecticut Printers, Inc.	3
Connecticut Utility Companies	21
Corrigan, Inc., J. C.	51
Dano Electric Co.	41
Detroit Steel Corp.	50
Dolge Co., C. B.	34
Dowd, Wylie & Olson, Inc.	2
Eastern Machinery Co., The	42
Enthone, Inc.	35
Etter Engineering Co.	54
Federal Textile Corporation	34
Foskett-Bishop Piping Co.	40
Gair Company, Robert	Inside Front Cover
Graphic Arts Co., Inc., The	34
Hall Company, Inc., Thomas W.	30
Harper Leader, Inc.	33
Hartford Special Machinery Co., The	24
Hawkrigde-Waterbury Div.	49
Howard Co., The	24
Interstate Industrial Protection Co.	34
Jones & Company, Inc., T. A. D.	4
Loeb Realty Associates	27
Love, Ralph H.	25
Manufacturers Assoc. of Conn., Inc.	2
Miller Company, The	31
Mills, Inc., H. J.	48
Morris Co., Robert E.	43
Morrissey & Cheney	43
Nutmeg Crucible Steel Co., The	48
Photo-Craft	24
Plainville Electrical Products Co.	45
Plocar Company, John J.	29
Robertson Paper Box Co., Inc.	37
Sargent & Wilbur Heat Treating Co.	53
Shuttleworth, Inc.	68
Souther Engineering Co., The Henry	48
Southern New England Telephone Co.	2
Stanley Works	22
Swan Tool & Machine Co., The	24
Tel-Rad, Inc.	47
Topmost Building Co.	26
Travelers Indemnity Co., The	32
Tumbling Sales & Service Co.	55
Waterbury Machine Tools & Products Co., Inc.	29
Winship, Richard	30
Wittstein, Jack	24, 30, 43, 48
Wiremold Co., The	28
Worth-Spar Co., Inc., The	48
Wyatt, Inc.	Inside Back Cover

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ins
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24
54
46
44
23
47
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37
42
39
48
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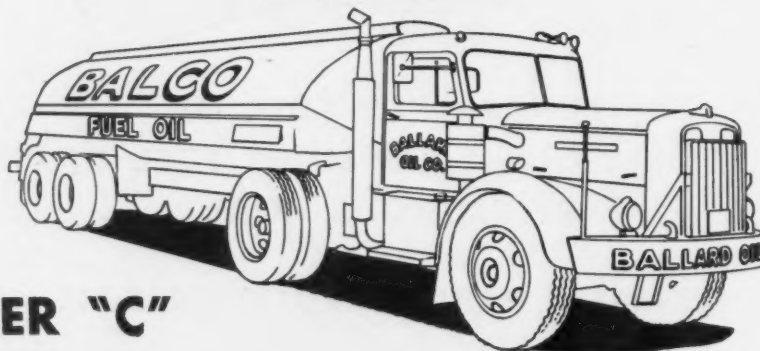
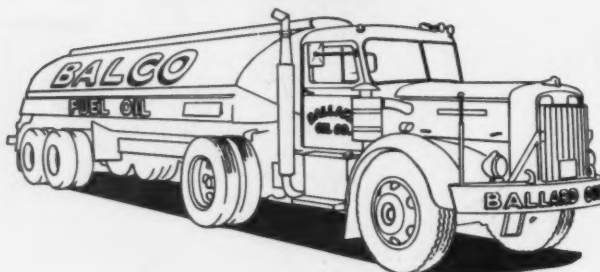
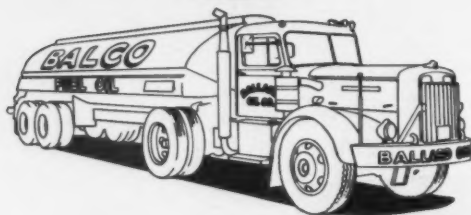
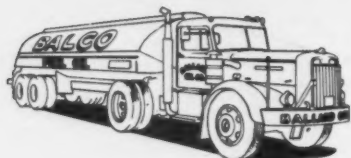
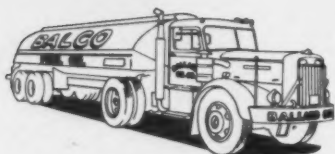
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